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ABSTRACT

This report evaluates an ongoing competency-based teacher education project involving two local colleges and two school districts. Following indepth interviews with selected project personnel, 1 66-item questionnaire was constructed covering the following six basic areas of concern: (a) program orientation, (b) program objectives, (c) communication, (d) role definition, (e) attitudes, and (f) modules. This questionnaire was distributed to current as well as former participants. Major recommendations included the following: (a) program goals and objectives and criteria for competent teaching must be more precisely defined; (b) modules should be rewritten to include descriptions of objectives and assessment criteria, and specification of the approximate amount of time required to complete the module; (c) the role of cooperating teachers should be more adequately defined; (d) the role of college personnel should be changed to include more field-based involvement and the assumption of more responsibility for the total education of the intern; and (e) participants should be more adequately prepared for involvement in the program. (Appendixes include the questionnaire, interview questions, letters and memorandums to participants, the evaluation proposal, a history of the program development, an article entitled "A New Style of Certification," a list of teacher competencies, and a list of behavioral objectives.) (Author/PB)

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AN EVALUATION OF THE CHEEKTOWAGA-D'YOUVILLE-MEDAILLE-SLOAN PROGRAM IN COMPETENCY-BASED TEACHER EDUCATION

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TABLE OF CONTENTS

PAGE

LIST OF TABLES iv

LIST OF FIGURES. ix

CHAPTER

1. Introduction 1

2. Review of the Competency-Based Teacher Education Literature 11

3. Methodology. 31

4. Results 43

5. Discussion 113

6. Recommendations 149

REFERENCES 159

APPENDICES

A. Proposal for CDMS Evaluation 163

B. A New Style of Certification. 172

C. History of CDMS Program Development (CDMS "Trial Project" Objectives) 186

D. Interview Questions 191

E. Memorandum to CDMS Participants Explaining Purpose of Evaluation and Introducing Evaluation Personnel 193

F. Evaluation Questionnaire 195

G. Cover Letter to those Distributing Questionnaires 208

PAGE

H. Introductory Letter with Questionnaire 210

I. Extra Introductory Letter for Mailed Questionnaires 212

J. Component Objectives (Substitute for Module Objectives). 214

K. Teacher Competencies 224

L. Objectives for the Elementary School Child . . . 231

M. Memorandum from Dr. Bukowski on Analyzing Module Objectives and CDMS Teacher Competencies 236

N. Memorandum from Dr. Bukowski on Program Improvement Activities. 241

LIST OF TABLES

TABLE		PAGE
1.	Distribution of CDMS Program Participants Responding to Questionnaire	36
1A.	Distribution of CDMS Program Participants Responding to Questionnaire by Combined Categories	37
2.	Distribution of CDMS Program Participants Serving in Additional Activities	38
3-4.	College or School District Association of CDMS Participants	39
5-6.	Years Teaching Experience, Tenure, and Number of Regular Student Teachers and/or Intern Teachers Assigned	40
7-8.	Age and Sex of CDMS Participants	41
9.	Periods of Participation in CDMS	42
10.	Reasons for Participating in the CDMS Program	55
11.	Method of Initial Preparation for Participation in the CDMS Program	56
12.	If At All Possible, I Will Participate in CDMS in the Future	57
13.	The Co-Operating Teachers Were Adequately Prepared to Work With Interns As Opposed to Working With Student Teachers	58
14.	The Interns are Adequately Prepared for Their Experiences in the Classroom	59
15.	Orientation for Participation in CDMS was Adequate	60
16.	The Objectives of CDMS are Clear to Me	61

TABLE PAGE

17. CDMS Seems to be Achieving Its Major Objectives as I Understand Them. 62

18. There is a Conflict Between the Objectives of My School/College and the Objectives of the CDMS Program. 63

19. There is a Conflict Between My Job Related Priorities and the Demands Required by the CDMS Program 64

20-21. Mean Rankings for Elements Thought to be Important for Any Competency-Based Teacher Education (CBTE) Program in General and for Actual Emphasis Placed on the Elements in the CDMS Program 65

20-21A. Rankings for Elements Thought to be Important for Any Competency-Based Teacher Education (CBTE) Program in General and for Actual Emphasis Placed on the Elements in the CDMS Program 67

22. The School District has More Responsibility in CDMS Than Under Previous Programs of Teacher Education 69

23. Appropriate Methods for Preparation for Participation in the CDMS Program for Interns and Teachers (if more Preparation is Needed) 70

24. A Systematic Method for Information Dissemination Exists 71

25. Regular Meetings with CDMS Personnel 72

26. Clear Who Can Help With Problems Regarding the Program 73

26A. Positions of First Two People to Whom Participants Turn for Help Regarding Problems with the Program 74

TABLE		PAGE
27.	Lines of Communication are Well-Defined . . .	75
28.	Lines of Communication Easily Accessible . . .	76
28-29.	Percentage of CDMS Participants Indicating Easy Access to the Lines of Communication Compared to Those Participants that Actually Use those Lines	77
29.	Use of Lines of Communication	78
30.	Time/Week Spent in CDMS Activities in Hours	79
31.	Where Most Time Spent Involving CDMS Activities	80
32.	CDMS Requires More Time Than Other Teacher Preparation Methods	81
33.	Rankings for CDMS Activities According to Amount of Time Spent in that Activity . . .	82
34.	CDMS Activity Priorities	83
35-36.	Participants' Perceptions of Those Who Do Have and Those Who Should Have the Major Responsibility for the Following Activities	84
37.	Feel Isolated From Other CDMS Personnel . . .	87
38-39.	Entering and Current Attitudes Toward CDMS Program	88
40.	Additional Remuneration is Necessary For Continuing in the Program	89
41.	Types of Remuneration Preferred	90
42.	My Ideas and Criticisms Are Taken Seriously	91
43.	Feel Committed to CDMS Program	92

TABLE PAGE

44. Would Re-make Same Decision About Participating in the Program 93

45. Most Important Changes to be Made in Modules 94

46. Modules to be Completed Before Field Experience 95

47. Persons Responsible for Evaluation and Signing of Modules 96

48. Essentiality of Modules to CBTE 97

49. Importance of Module Completion vs. Other Work in Classroom 98

50. Module Work Suffers Because of Commitment to Classroom Program. 99

51. Modules Allow for Individuality 100

52. Average Time Spent on Modules by Interns. . . . 101

53. Time Spent by Participants Other Than Interns Reading/Observing/Evaluating Modules 102

54. Interns' Aware of Their Completion of Modules 103

55. Methods Courses Should Be Taken Before Field Experience 104

56. Type of Preparation Interns Need Prior to Field Experience 105

57. Substance of Modules Should Include Routine Classroom Procedures 106

58. Interns Conduct Themselves Professionally When Entering Field Experience 107

TABLE		PAGE
59.	Interns Remain in Field Position Until End of Public School Year	108
60.	Module Completion Indicates Teacher Competency.	109
61.	First Semester Intern Placed with Second Semester Intern.	110
62.	Criteria for Module Completion is Clear	111
63.	Methods Courses Simultaneously With Field Experience	112

LIST OF FIGURES

FIGURE		PAGE
1.	Description of the CDMS Program of Internship	3
2.	Basis of Organization in the CDMS Program	5
3.	Relationship Among the CDMS Program Personnel	6
4.	Scheme for the Development of Goals for Competent Teachers, Teacher Competencies, Module Objectives, and Modules	123
5.	Role Orientation of CDMS Participants in Relationship to the Program's Major Focus	136

Chapter 1

INTRODUCTION

CDMS is a program in competency-based teacher education which has been operational since January 1973. The program consists of a joint effort involving Cheektowaga Central School District, D'Youville College, Medaille College, and Sloan Central School District, with the support of the New York State Education Department. A Policy Board consisting of individuals representing the various interest groups in the program is the official governing body for the program, and a full-time director is responsible for administering the program.

In April, 1974, the Policy Board contracted with the Educational Research Center of the State University of New York at Buffalo to evaluate the CDMS program and to make recommendations aimed at improving the quality of the program. The purpose of the evaluation was to contribute to the still formative stages of the program.

The objectives of the evaluation, as presented in the Center's proposal (see appendix), are basically two-fold: (1) to describe as well as possible what the CDMS program should be according to the State mandates, Policy Board mandates, and the limited evidence and theory that is available regarding PBTE and CBTE, and (2) to describe what CDMS actually is according to the perceptions of the program participants and observations made by members of the evaluation team. These descriptions and any discrepancies will be used to make recommendations for program revisions. In order to accomplish these objectives, a selective review was made of the literature and research on CBTE, the written material available on the CDMS program was reviewed, various individuals in the program were interviewed by the evaluation team, and a questionnaire was distributed to past and present

participants in the program.

Program Description

During the spring of 1971 the New York State Education Department, Division of Teacher Education and Certification, distributed a paper entitled, "A New Style of Certification" (see appendix) which outlined the requirements for establishing experimental Trial Projects. The purpose of these Trial Projects was to develop and evaluate different alternatives for establishing a competency-based system of certification in New York State. This paper discussed four requirements for the development and operation of each project.

In 1972, the New York State Education Department established 12 experimental projects, each of which was concerned with a different area of certification. The CDMS program, currently the only operational project, is concerned with the certification of teachers for elementary schools.

As might be expected of a developing program, there is presently little cohesive or comprehensive written material describing the CDMS program. Therefore the following description of the various aspects of the program is sketchy and as accurate as possible at the date of this writing. It is possible that some functions, responsibilities, descriptions, etc. are based on subjective impressions which differ from one program group or participant to another.

The CDMS program is designed as a year-long, field-based internship. It consists of four phases as outlined in Figure 1. Phase I consists entirely of course work and is three weeks in length. In Phases II and III there is a combination of course work and field-based experiences with increasing amounts of time spent in the field. Phase IV is six weeks long and is entirely field-based.

The objectives of the program as established by the Policy Board are pre-

Figure 1

Description of the CDMS Program of Internship

1st Semester			2nd Semester	
PHASE I (3 weeks)	PHASE II (13 weeks)		PHASE III (10 weeks)	PHASE IV (6 weeks)
A. Orientation at College: CBTE and CDMS The CDMS Internship B. Introduction to Module Work at College: Psychology of Learning Reading Methods Art) Use A-V) Campus Science) school Music) if Soc. St.) needed Lang. Arts) Math) C. Social Mixer D. Introduction to the realities of the field.	A. Course Work at College (2 days/week, Mon. & Fri.) Psychology of Learning Reading Methods Music Social Studies Mathematics Language Arts B. Field Based Experience (3 days/week, T, W, & Th. full time) 1. Orientation to dists., schools & staff 2. Developing a close working relationship between intern and supervising teacher 3. Observation: gaining insights of pupils & classroom routines. 4. Competencies performed 5. Regular assignment of simple teacher tasks.	END OF SEMESTER--CHANGE SCHOOLS	A. Course Work and Research at College (1 day/week, Mon.) B. Seminars: Field Problem-Centered (1-2 in each module area) C. Field-Based Work (4 days/week, T, W, Th, & F) 1. Observation 2. Competencies performance 3. Regular Assignment of more complex teacher duties. 4. Assumption of 1 or 2 classes on regular basis	A. Remediation and Recycling, as needed on individual basis. B. Field Based (5 days/week) Intern takes on full teacher duties

sented in the appendix.

At present, the basic program consists of nine components, although new components are presently being developed. They are: (1) art education, (2) audio-visual, (3) language arts education, (4) mathematics education, (5) music education, (6) psychology of learning, (7) reading, (8) science education, and (9) social studies education. The components are futher broken down into clusters and 131 modules. Interns are required to complete these 131 modules, which are purported to be competency-based. In addition, approximately half of the interns are taking a reading concentration consisting of two additional components consisting of 33 modules.

Each module is supposed to deal with a specific competency. The modules can be completed by the interns at their own pace, and when interns feel they are ready, they go to an authorized person, demonstrate the competency required, and have the module signed, indicating that the competency has been mastered. The modules are usually signed by either the co-operating teacher or a college instructor, although other teachers can sign certain modules. During the first three phases, instruction in the various areas is provided on a regular basis by the college instructors on the campuses.

Program Organization and Participants

The basis of organization in the CDMS program is presented in Figure 2, and the relationships among the CDMS personnel are indicated in Figure 3. These figures were provided by the program director and provide a graphic presentation of the program. The function of each component of the organization will be briefly discussed.

Policy Board

The State Educational Department's A New Style of Certification required that

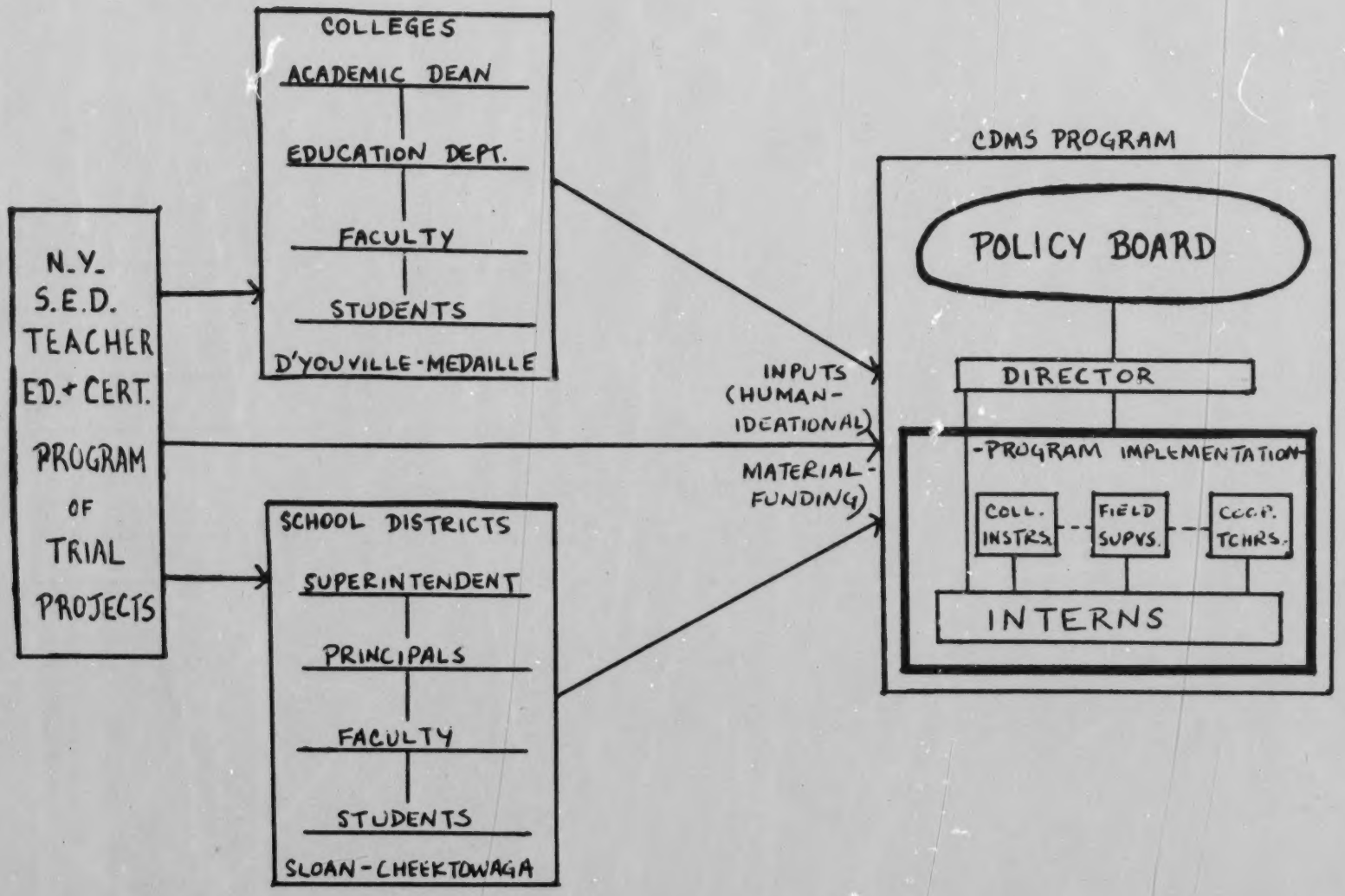


FIGURE 2: BASIS OF ORGANIZATION IN THE CDMS PROGRAM

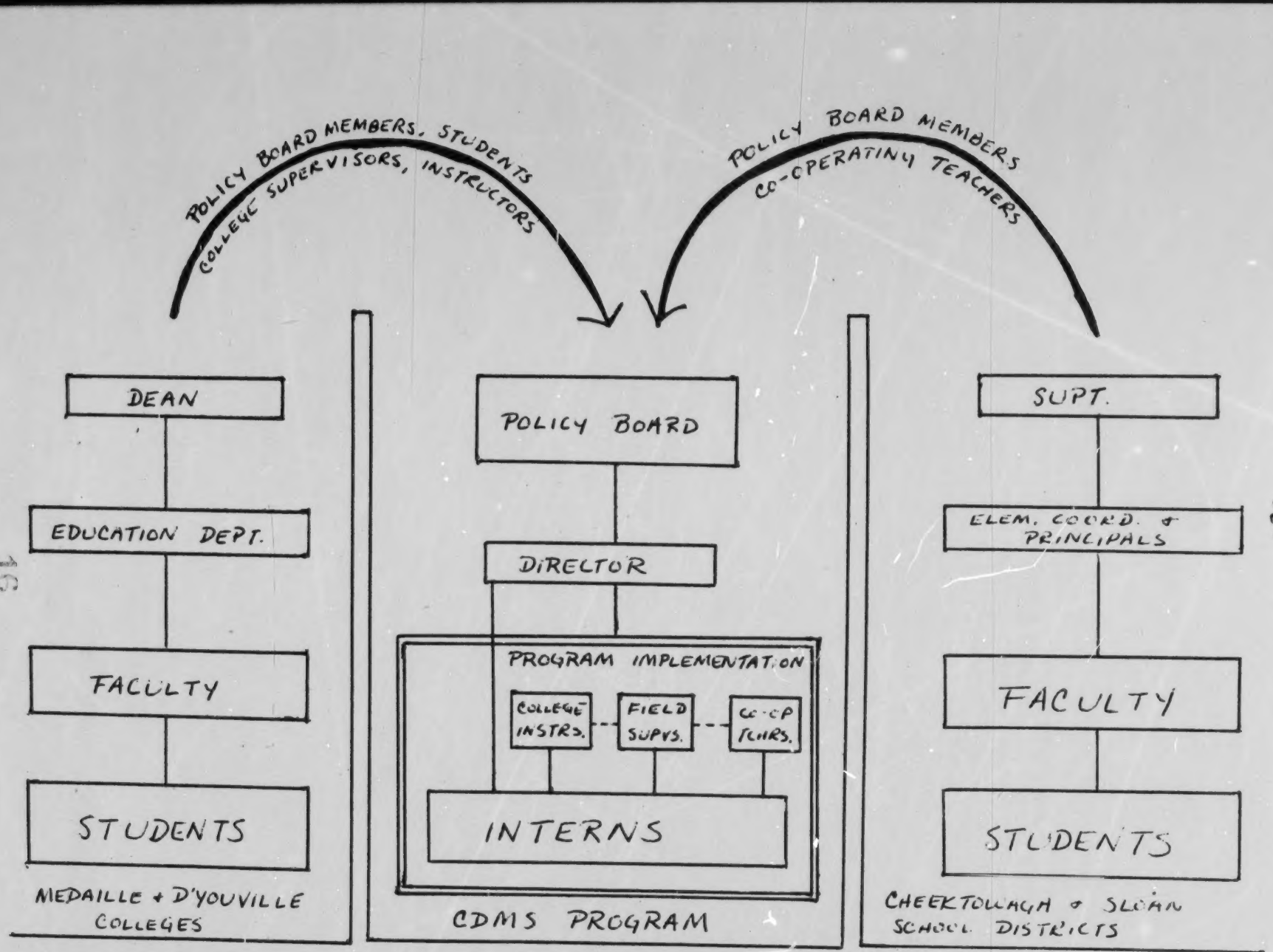


FIGURE 3: RELATIONSHIPS AMONG CDMS PROGRAM PERSONNEL

each Trial Project must have a Policy Board that is responsible for the planning, criteria development, implementation, and evaluation of the program. This board must include representatives of the (1) public schools (representatives approved by the appropriate Board of Education), (2) institutions of higher education (representatives approved by the chief administrative officer), (3) teachers (representatives elected or selected by the teachers in the participating districts, additional persons representing national or state teachers' groups may be included), and (4) teacher education students (representatives selected from and approved by such students). In addition, representatives of other agencies may be included, such as interested lay citizens. According to the State guidelines, each agency is to have"...parity both in the power to influence decisions and in the assumption of responsibility for implementing the decisions."

The CDMS Policy Board consists of 15 members including the director, who is a non-voting member. Each of five constituencies are represented by the number of individuals indicated:

1. 4 students (1 junior and 1 senior from each college)
2. 2 lay citizens
3. 4 administrators (1 from each of the institutions involved in CDMS)
4. 2 teachers (1 from each school district)
5. 2 college instructors (1 from each college)

Representatives are elected for a two-year term with approximately one-half of the Board being elected each year.

The Policy Board normally meets once a month during the school year. Each constituency has one vote on a parity basis, and three votes are necessary to carry a motion.

The Board appointed Dr. Walter Bukowski as the first full-time director of the CDMS program.

Supervising Teachers (Co-operating Teachers)

Supervising teachers are classroom teachers in the two school districts to whom student participants (or interns, as they are called in the program) are assigned. In general, their function is similar to a master or critic teacher in a traditional student-teaching program. According to the January, 1973 edition of the Handbook for the Implementation of the CDMS State Pilot Project, they are responsible for suggesting to the intern his individual needs in course work, assisting him in gathering necessary resource materials, and without disrupting regular classroom routine, providing opportunities for the intern to demonstrate mastery of objectives that are an out-growth of academic course work.

The supervising teachers were originally referred to within the context of CDMS as co-operating teachers. With the placement of the second group of interns during the spring of 1974, the term co-operating teacher was changed to supervisory teacher. To avoid confusion between supervisory teachers and field supervisors, we have retained the original terminology of co-operating teacher throughout the text of the report.

Field Supervisors

A field supervisor is a college instructor who is responsible for supervising the interns' field experience. They work with the co-operating teacher and the interns in instructing, guiding, and evaluating the interns' teaching experiences.

College Instructors

College instructors are responsible for the academic course instruction of the interns. This is accomplished through the use of various modules which the

instructors are responsible for preparing and evaluating. The instruction necessary for mastering some of the modules is provided by them on the college campuses.

Interns

The college students participating in the CDMS program are referred to as interns. The first 25 students (16 from Medaille and 9 from D'Youville) began the program in January, 1973. Sixteen completed the program in December, 1973, and another 7 during the following six months. The second group of 25 interns (15 from Medaille and 10 from D'Youville) entered the program in January, 1974.

Committees

Various committees have been formed which serve as an advisory function to the Policy Board. Each of the constituencies is represented on each committee with the exception of the lay citizens, who decided that they wanted to serve only on the Social Committee. Each constituency is responsible for selecting or electing representatives to the committees, and each committee then selects its own chairperson. The four standing committees are the (1) Curriculum Committee, which also includes a Program Design Subcommittee, (2) Certification Committee, (3) Ways and Means Committee, and (4) Social Committee. The director is an ex-officio member of each committee.

The appendix includes a brief history of the beginning of the program as outlined by the program director.

Organization of the Evaluation Report

This evaluation report is organized in the following manner. Chapter 2 reviews the literature in the competency-based teacher education field; the literature was selected and reviewed on the basis of its relevance for this particular CBTE program, as well as for its general excellence in the field. The method by which

the evaluation was conducted is presented in Chapter 3, along with some of the tables of findings which describe the sample of respondents. In Chapter 4, the remainder of the data from the evaluation questionnaire is given, along with brief commentary pointing out the highlights of the findings. Specific and general discussion about those results occurs in Chapter 5, including comments regarding the CDMS program within the larger framework of competency-based education theory. An attempt is made in Chapter 6 to suggest some specific plans for revision of the CDMS program, as well as to indicate future evaluation needs and research implications.

It should be kept in mind throughout the reading of this report--the evaluation methodology, the findings, the discussion and recommendations--that the CDMS program is a trial project, and also that the CBTE field is a trial field. Although similar projects, programs, articles, and books on the subject are proliferating, much remains that is experimental, and as a consequence, inconsistencies, gaps, limitations, mistakes, disagreement, and rapid change must be tolerated. It is so with any developing area.

Chapter 2

REVIEW OF THE COMPETENCY-BASED TEACHER EDUCATION LITERATURE

The literature in the area of competency-based teacher education (CBTE) is multiplying at an unimaginable rate. The title of a current bibliography in the area--"The Last Relatively Complete Tentative Bibliography on Competency-Based Education (Schmieder, 1974)"--gives some indication of just how rapidly growth in the literature is occurring. This rapid expansion and the number of accumulated articles, however, tend to present a false impression of the "state of the art."

It appears that what is mostly known about competency-based education is that we know very little. Andrews (1974), lists the following as what we do know about competency-based education:

(1) Competency statements are available for review and consideration.

(2) Objective evaluation is not yet perfected.

(3) Research relating student learning to teacher competencies still needs to be done.

(4) Developing a competency system is a complex and costly task. (p. 36)

While Andrews' list may at first appear somewhat discouraging to those involved in CBTE programs, he does provide a starting point for future research. The starting point for future research, which Andrews provides, is an identification of what must still be accomplished. Ideally for Andrews, the four item list of what we do know about CBTE should include the following:

(1) A list of basic competencies that all teachers should possess and be able to demonstrate.

(2) Techniques to evaluate whether or not a teacher actually has these competencies.

(3) Research showing which teacher competencies are related to children's learning.

(4) Developing a competency system of preparation and evaluation is a relatively simple task and is not likely to be more expensive than present systems. (pp. 31-36)

While much of what has been written has helped bring us to our current state of knowledge about CBTE, many of the articles are just restatements of what has already been established about CBTE or are descriptions of traditional teacher education programs cloaked in the terminology of the CBTE movement. Houston (1974) writes:

> Some CBE programs have become creative efforts that are harbingers of more effective preparation of professionals. Others are only warmed-over programs with little changed but the name. They assume that using the terminology of the movement will automatically lead to greater effectiveness or at least intellectual respectability. No so! (p. 14)

Houston firmly states his position that programs that seek a CBTE orientation must avoid falling into the trap of changing some superficial elements of their program without really changing its substance and thinking of themselves as being competency-based. For example, a simple translation of current courses into modules and course objectives into behavioral terms without being concerned with a conceptualization of teaching,in Houston's words, "shortcircuits the process and undermines a potentially powerful movement (1974, p. 15)."

Andrews (1974), provides us with explanations for our stagnation. For instance, the reason posited for not having a list of basic competencies is that the notion of having a list of basic competencies that all teachers possess is in itself in question. The reason that objective evaluation is not yet perfected is that even though behavioral objectives are used for performance objectives, the evaluation in actuality is nothing more than another person's subjective judgment as to whether the objective was achieved. One hurdle slowing down research on the relationship between teacher competency and children's learning is that it is almost impossible

to control for all the factors that may influence the pupil's learning before or during the time that he is in class. Related to this same issue is the fact that teacher effectiveness might not be related to individual competencies, but rather to a unique combination of competencies which are more difficult to isolate. Probably the factor that keeps CBTE so costly is the amount of faculty time which is necessary to develop the program (writing objectives, modules, etc.).

In addition to those reasons for stagnation presented by Andrews, Houston (1974) also suggests that other reasons for the lack of "real" growth in CBTE might be the lack of use of theoretical constructs, lack of clarity of conceptualization, and lack of research. The rapid growth in CBTE has removed its implementation away from its theoretical roots. Programs anxious to implement CBTE are sometimes careless in their implementation and try to copy the outward appearance of CBTE without being in touch with its substance.

To continue the development of CBTE then, programs must validate the theoretical constructs of the movement. This can only occur if a major emphasis of programs using CBTE is placed on research. In addition, a clear conceptualization of the goals of teacher education must be developed so that the instructional program may be designed consistently with these goals. The goals provide the program with a focused product and enable it therefore to evaluate its success. Both the goals, and means of achieving them, must be continuously validated by research. An emphasis must be placed on showing the relationship between teacher competence and student performance (see Koehler, 1974; Rosenshine & Furst, 1971). In addition, the program must continuously conduct research to determine the effectiveness of the instructional units--modules (Massanari, 1973).

What follows is a short history of, definition of, and rationale for competency-

based teacher education. A discussion of its distinguishing characteristics and techniques for evaluation and assessment are also included.

History of Competency Based Teacher Education

Steffenson (1974) traces two sources of development of competency-based programs of teacher education. One is the efforts of separate and collective faculties across the nation to improve the quality of their elementary and secondary teacher education programs. The other, which is more specific with a clearly identifiable impact, is the efforts of the U. S. Office of Education. The major impetus, according to Steffenson (1974), may be traced back to 1967 and the issuance of a request for proposals by the Bureau of Research within the Office of Education with the purpose of supporting the development of a restructuring of teacher education programs. In addition, the U.S. Office of Education is currently supporting or has supported such programs as Teacher Corps, the Bureau of Educational Personal Development Task Force 72, the Multi-State Consortium of Performance Based Teacher Education, and the Elementary Teacher Education Models project. These programs and projects supported by Office of Education funding have provided a working model of CBTE. They have previously gone through much of the trial and error of program implementation and by their experiences made implementation an easier task for many other programs (Steffenson, 1973; Cooper, Weber, & Johnson, 1973).

The CBTE movement in New York State came to fruition in a formal way in the Spring of 1972 when the State Education Department detailed a four step procedure to be followed for the development of trial competency based teacher education projects. "A New Style of Certification" (see appendix), which outlined the four step procedure, invited colleges and school districts to write program proposals

for the implementation of CBTE. These trial projects were to be funded so that they could provide models of CBTE in the state.

In addition to the large number of articles and books recently appearing dealing with topics of concern for CBTE, additional evidence for the rapid growth and growing momentum of CBTE comes from a survey conducted in the Fall of 1972. A survey conducted by the American Association of Colleges for Teacher Education (Schmieder, 1973) found that seventeen states had devised teacher certification procedures based on the CBTE concept. In addition, 125 of 783 educational institutions responding to the questionnaire reported that "for the most part" they could be characterized as competency-based. Three hundred sixty-six institutions, indicated that they were in the developmental stage and planned to establish a CBTE program. More than half of the institutions responding to the survey questionnaire then, perceived their programs to be either moving toward or already competency-based.

The impetus for the competency-based movement, according to Houston (1974), was a growing concern for accountability and the development of instruments for analyzing teacher performance (e.g., Flanders Interaction Analysis). Houston (1974) refers to CBTE as a "culturally based movement" (p. 5) because it was the forces of accountability and the need for personalization in American society that contributed to its development.

Accountability, which is primarily concerned with both value decisions regarding a process (e.g., cost benefit analysis) and responsibility for outcome, is a forceful trend today as a result of increasing costs and limited funding. The need for personalization, which contributed to the development of CBTE, is the result of the dehumanizing aspects of the institution of education. It is primarily the aspects of Jackson's (1968) crowds, praise, and power that CBTE tries to alleviate.

Definition of Competency-Based Teacher Education

Most authors use competency-based and performanced-based teacher education interchangeably. Even though this is the case, there does appear to be subtle differences in the meaning. Lindsey (1973), defines competency to include performance, knowledge, and values. For her, performance is what teachers do (observable behavior) and has associated with it a neutral act. Competencies are not neutral in that they connote valued abilities and do include the ability to perform in desired ways. This concept of competency allows for the inclusion of many types of competency in addition to performance and allows for a better fit with the teacher's role, which is extremely complex.

For Lindsey (1973),

> The process of designing a competency-based program of initial (preservice) teacher education requires, (1) specifying in advance expected outcomes in terms of competencies to be demonstrated by graduates of the program, (2) develop learning opportunities and environments expected to facilitate students' progress toward specified outcomes, and (3) constructing and using evaluating procedures and instruments directly relevant to the stated competencies (pp. 181-182).

Houston & Howsam (1972) state that two characteristics are essential to the concept of competency-based instruction. The first is precise learning objectives defined in behavioral and assessable terms. This characteristic also includes Lindsey's (2) and (3) above. The second characteristic is accountability. "The learner knows that he (or she) is expected to demonstrate the specified competencies to the required level and in the agreed upon manner. She or he accepts responsibility and expects to be held accountable for meeting the established criteria" (p. 4).

According to Houston (1974), the most widely quoted and accepted definition of CBTE was suggested by Elam (1971). The five essential elements that must be included in a program for it to be defined as CBTE according to the Elam definition

are:

(1) Competencies (knowledge, skills, behaviors) to be demonstrated by the student are:

a. derived from explicit conceptions of teacher roles

b. stated so as to make possible assessment of a student's behavior in relation to specific competencies

c. made public in advance

(2) Criteria to be employed in assessing competencies are:

a. based upon, and in harmony with, specified competencies

b. explicit in stating expected levels of mastery under specified conditions

c. made public in advance

(3) Assessment of the student's competency:

a. uses his performance as the primary source of evidence

b. takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behaviors

c. strives for objectivity

(4) The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completion

(5) The instructional program is intended to facilitate the development and evaluation of the student's achievement of competencies specified.

Elam's definition appears to be very similar to those of Houston & Howsam (1972) and Lindsey (1973).

In addition to their basic elements, all three definitions include elements that are implied, related or desirable. We have compiled a list of these non-essential elements for CBTE using as our source those non-essential elements described by the authors whose definitions of CBTE we have cited previously (see Elam, 1971;

Houston & Howsam, 1972; Lindsey, 1973). They include:

(1) student-centeredness

(2) individualization and personalization

(3) self-instruction

(4) field-centeredness

(5) learning experience guided by feedback

(6) the program as a whole is systematic

(7) the emphasis is on exit, not on entrance, requirements

(8) instruction is modularized

(9) the student is held accountable for performance

(10) broad base for decision-making

(11) both students and teachers are designers of the instructional system

(12) the program includes a research component and is open and regenerative

(13) role integration takes place as the prospective teacher gains an increasingly comprehensive perception of teaching problems.

In summary then, it appears as if the major characteristics of a competency-based teacher education program include: (1) competencies made public and explicitly stated in behavioral terms (2) the use of objective criteria directly related to the competencies with the required level of performance determined prior to instruction, and (3) an instruction program that facilitates mastery of the competencies.

Rationale for Competency-Based Teacher Education

According to McDonald (1974), a distinction must be made between the rationale for the content and the rationale for the design of CBTE programs. The content of the program is concerned with what the pre-service teachers are to learn. The design of the program is concerned with the way in which the program will serve as

a delivery system for that content. The rationale for the content stems from two sources. One source, the philosophy of education, provides the rationale for what it is that teachers must be prepared to teach, i.e., what children should be educated for. The other source, theories of instruction, provides the rationale for how the pre-service teachers will be taught to teach.

The rationale for competency-based programs derives from concepts about the nature of what is to be learned as a result of the program--teaching competence--and from a model of a system most likely to enhance this acquisition.

McDonald (1974) suggests that competency-based programs are well-rooted in the theory of training psychology, which in turn has its roots in behavioral psychology, the aspects of social learning theory that are concerned with modeling and imitation behavior--and in systems analysis strategies for the development of effective man-machine systems. Reinforcement principles and teaching models have also been applied.

These origins, according to McDonald (1974), account for 3 characteristics of practically all CBTE programs:

(1) the organization of what is to be learned into interdependent components

(2) the precise specification of what is to be learned

(3) the provision of feedback during learning sequences (p. 18).

The above three characteristics are completely represented in the definitions of CBTE presented earlier. McDonald has provided us with a theoretical basis for CBTE which provides some face validity for the proposed success of CBTE programs.

Distinguishing Characteristics of Competency-Based Teacher Education Competencies:

According to Andrews (1974), a list does not exist that includes the basic com-

petencies that all teachers should possess and be able to demonstrate. A catalogue of competencies has been formulated by Dodl et. al. (1971), but no attempt has been made to indicate which competencies are most appropriate. Andrews (1974) suggests that the difficulty in preparing a list of basic competencies is the result of both a human and philosophical problem. The human problem is just one of agreement, i.e., getting consensus on a problem of such controversey. The philosophical problem is whether in fact there should be a basic set of competencies, i.e., is any competency so broad that all teachers should possess it.

Andrews (1974) raises the point that in a world of constant change there may be no basic competencies. In addition, he points out that some people have been attracted to the competency movement because they see it as a way to describe the unique strengths and weaknesses of each teacher. "The goal is not to hold all teachers to the demonstration of required competencies, but the creation of a system that would allow teachers to do what they do best (p. 32)."

Arends, Elmes, & Masla (1972) differ with Andrews (1974) and argue strongly that while competency-based teacher education may provide an individualized instruction program, "it does not espouse individualized outcomes (p. 5)."

It seems hard to believe that there would not be some compromise in the two points of view. It is strongly doubted that Arends et al. would hold firmly to the contention that everyone would have to be competent in the same set of competencies. That, as pointed out by Andrews, is an impossible task in a world where there are just too many possible behaviors for one person to master. In addition, one also would have to agree that possibly with appropriate research evidence there might be a few basic competencies that should be mastered by all. Andrews (1974), however, points out that research has not yet shown, except for the work by Rosenshine

& Furst (1971), that teacher competencies can be directly related to children's learning.

Not only has research been unable to demonstrate a relationship between teacher competence and student performance, but except in rare cases, techniques do not exist to objectively determine whether a teacher has mastered a competency (Andrews, 1974).

Another related problem suggested by Andrews (1974), is that competencies needed for effective teaching may not exist separately. Effectiveness in teaching might result from the ability to combine competencies, sometimes in unique ways, within short periods of time. Theodore E. Andrews (1973), the editor of Performance Based Teacher Education, pointed out that performance programs are sometimes criticized because they consist of a series of related pieces, e.g., modules, but lack an overall statement of what the ultimate synthesis is that should result from the program.

The question should be raised as to whether a person who has successfully completed all the competencies is truly a competent teacher. Phrased another way, does the sum of the parts equal the whole? Arends et al. (1972) conclude that this is a question that is amenable to research. This is because in a competency program the component parts are identified and categorized and the opportunity exists to answer the question.

Arends et al. (1972) suggest that because cognitive behaviors are most easily objectified, affective behaviors are sometimes overlooked when competencies are listed. The authors state that the affective domain can be dealt with in objective terms and that more attention should be given to competencies including the affective domain.

Since there is no clear consensus as to which competencies should be included on a list of competencies that competent teachers must have, lists of competencies might differ from one teacher education program to another. There is no specific universal process for developing the list of competencies. Houston (1973) has described six approaches for identifying competencies. Prior to identifying competencies, Houston states that programs must specify assumptions or propositions about three relevant areas: (1) society, education, learning, and teacher education; (2) the role of the practioner (e.g., counselor, administrator, and teacher aide); (3) characteristics and constraints about the teacher education program. This is important to Houston because without this prior specification, programmatic decisions must then be based on immediate, persuasive arguments or on political grounds instead of on an explicit framework which underlies the program as a whole.

Most of the six procedures for identifying competencies rely on a priori rather than empirical grounds. The first is course translation in which the program staff simply writes goals as behavioral objectives and some attempt is made to individualize the delivery system. The basic weakness of this approach, according to Houston, is that it does not provide for a new conceptualization of the program as a whole. Another approach is task analysis, which is discussed along with the next approach--needs of school learners--in the section on objectives in Chapter 5. The fourth approach, needs assessment, examines the consequences of teacher action and then formulates a teacher education program to prepare for coping with these consequences. In the fifth approach, a theoretical position is specified and the teacher preparation program logically and deductively built from that position. The last approach, the cluster approach, begins by identifying several general program

areas. Competencies are then listed which fall into that domain. The behavioral objectives for the pre-service teachers are then written from these competencies.

The module objectives can be classified into at least five types according to Houston & Howsam (1972). They are:

(1) Cognitive objectives which specify knowledge and intellectual abilities or skills. Competency is usually assessed through written tests.

(2) Performance objectives which require the learner to demonstrate an ability to actually perform some activity.

(3) Consequence objectives which are expressed in terms of accomplishments of the students under direction of the teacher trainee.

(4) Affective objectives which deal with the realm of attitudes, values, beliefs, and relationships. These objectives resist precise definitions and thereby preclude the precise assessment sought by competency-based approaches. Affective behavior normally is related directly to the social setting in which it occurs. It is not easy to contrive--or even to determine accurately--the settings needed for training and for monitoring affective behavior.

(5) Exploratory objectives (also called experience or expressive objectives) which do not fit fully within the category of behavioral objectives because they lack a definition of desired outcomes. These objectives specify activities that hold promise for significant learning. They require the learner to experience the specified activity. Assessment can be made only in terms of whether the learner actually did undertake the required activity (pp. 6-7).

Houston and Howsam (1972) state that in traditional teacher education programs the focus is on cognitive objectives. In a competency-based teacher education program the focus should be shifted to include performance and consequence objectives. "The teacher must not only know about teaching, but also must be able to teach and to produce changes in students (p. 7)." In addition, despite limitations in the ability to deal with affective objectives, Houston & Howsam (1972) state that, "no teacher education program can afford to neglect the affective dimensions, which are integral to all other aspects of competency (p. 7)."

Johnson & Shearron (1973) discuss the entire issue of specifying assumptions, goals, and objectives. They, like Houston (1973), stress the importance of establishing an explicit framework for the program. In our discussion of objectives in Chapter 5 we discuss assumptions about teaching as goals for teaching. It is from these goals that competencies are written, and from the competencies that module objectives are written. Our position is very similar to that of Johnson & Shearron (1973) and Houston (1973), but we feel that the use of goals as opposed to assumptions, helps to better focus the task of providing an explicit, underlying framework (see also Cooper & Weber, 1973).

The Instructional Program:

Burke (1972) writes that with a common set of outcomes an instructional program or curriculum can still have variety and flexibility. Burke proposes that the variety of instructional strategies available should increase continually as students and faculty contribute to the program on the basis of their experience with it.

A positive aspect of the instructional program--individualization--could result in a negative side effect--alienation. Burke (1972) points out that individualization does not mean the end of seminars, lectures, or people getting together. He also reminds us that a full lecture hall might be just as lonely and isolating as no one around at all. Burke concludes that if a person is involved in the decision-making and considers themselves a program participant, that isolation diminishes.

To try and alleviate the negative aspects of individualization, without at the same time eliminating its positive effects, some writers in the area of CBTE state that the concept of personalization should be listed as one of its non-essential, but related elements, instead of individualization. Schalock & Garrison (1973), propose that the concept of individualization is contained within the concept of person-

alization. Personalization, in addition to providing opportunities for independent study, assures a humanistic learning environment. In personalization, in addition to having available several routes to achieve an outcome, the learner is helped to select the route that is most appropriate. One of the major conditions necessary for implementation, according to Schalock & Garrison, is that the students participate in the design of their own programs. A necessary aspect of this is negotiation. The student must be given the opportunity to negotiate with representatives in the development of their specific program of study. Each program of study should be allowed to vary according to the student's interest, specialization, background of knowledge and skill, and personal learning style.

In order for each student's program to enable them to become a competent teacher, Schalock & Garrison state that some competencies might still be necessary for all students (alternate routes of achieving these competencies, of course, must be provided). In addition to those competencies required for all students, some competencies will be required of students who choose to specialize in a particular area (e.g., reading). Some competencies will be listed as not belonging to either of the required groups. Students would negotiate their programs to include some or all of these competencies. Since little empirical evidence is available concerning the relationship of teacher competence and student behavior, competencies of a questionable nature could be made available to, but not required of students in this fashion. This system requires that a student have a sponsor--a faculty member who is responsible for the student's well being in the program and for helping to develop his program of study. The sponsor could help the teacher education program keep track of the progress of the students and could help to provide information as to program success.

Lindsey (1973), Houston & Howsam (1972), and Elam (1971) are all supportive of the concept of a broad base of decision-making. This shared decision-making and parity among the program participants in CBTE programs should result in a lessening of alienation.

The learning model of competency-based programs is a cybernetic model, according to McDonald (1974). In the model the learner is the input into the system. He or she is placed in teaching situations in which teaching performances are enacted. The output is the set of performances that are used in this situation, on which continuous feedback is given so that the students are effective in the situation.

Competency-based education has developed a modular approach for delivery of the instructional program because it is well suited for the cybernetic model. The modules are usually designed with hierarchical sequencing of skills and culminate in the combinations of higher order skills. The learner in this system, according to McDonald (1974), is an information processor.

Houston & Howsam (1972) point out that while technology and the systems approach are enablers for competency-based instruction, they are not synonomous with it.

> "Individualization of competency-based instruction naturally leads to the use of modules, which permit clear specification of learning objectives, an array of alternative activities, an assessment procedure, and learner accountability. Competency-based instruction rarely is considered without reference to some kind of unit packaging. Nonetheless, modularization and competency-based instruction are not the same thing" (Houston & Howsam, 1972, p. 5).

The instructional model is a set of experiences intended to facilitate the achieving of competencies. The module, according to Houston & Howsam (1972), includes five parts: (1) the rationale--a statement of importance, (2) objectives--in criterion referenced terms, (3) a pre-assessment, (4) the enabling activities and

(5) the post-assessment.

Successful performance on the post-assessment test would enable the student to move on to another module; unsuccessful performance usually leads to a recycling through optional activities. Modules also include feedback mechanisms by which students are kept informed of their performance and progress.

Ether (1973) deals in his article with some of the problems encountered with the instructional system in a CBTE program. Traditional time and semester schedules are no longer necessary and may even be a hinderance with an individualized program. In addition, record-keeping becomes a time-consuming task unless arrangements are made to deal with this aspect of the program.

Another consideration is that instructors must readjust to working with modules and an individualized program. While the role of all CBTE participants will continue to be in a state of flux until CBTE programs become stabilized, the need is not for definitions of the new roles, but rather an understanding that the roles are evolving (Wiersma & Dickson, 1973). In dealing specifically with the evolving college faculty role, Jones (1972) proposes that the orientation should become one of more field involvement where the college faculty member can function as a "clinic professor" which will involve working in the schools as arrangers, demonstrators, prescribers, evaluators, and diagnosticians.

Evaluation

Joyce (1974) posits that there are in effect really two categories of evaluation. One is the assessment of the competence orientation itself, that is, developing a data base to help make decisions about the effectiveness of CBTE versus competing programs of teacher education. The other category is the assessment of the component parts of a CBTE program or possibly the comparison of two or more CBTE

programs.

In reference to assessment of the competence orientation itself, McDonald (1972) suggests that competency-based teacher education will succeed or fail to the degree that its effects can be determined and judged. This, McDonald asserts, is supported by straightforward logic. Traditional programs have not had to demonstrate that their graduates become competent teachers; however, competing programs will have to demonstrate that their trainees are more effective. McDonald (1972) concludes that this demonstration of superior effects is necessary in order to supplant the older, traditional programs of teacher education.

The internal evaluation system--the assessment of the component parts of a CBTE program--includes at least four aspects according to Houston (1973) and Massanari (1973). They are concerned with the extent to which: (1) the objectives are valid for educating competent teachers, (2) the modes of assessment and the criterion levels are appropriate, (3) the achievement of the objectives by the teacher trainees is facilitated by the instructional strategies, (4) organization and management practices facilitate objective achievement (p. 204).

The task of validating the objectives for competent teachers has not progressed very far. One reason for this is the difficulty associated with achieving a consensus as to the definition of competent teacher (Andrews, 1974). It has only been recently that researchers have focused their definition of teacher competence on the ability to cause cognitive gains in their pupils. McDonald (1972) has stated that the ultimate criterion of teacher competence is that of pupil performance. While the work of Rosenshine & Furst (1971) is frequently cited as demonstrating that there is a relationship between teacher performance (competence) and pupil behavior, Potter (1974) in a recent review concludes that much research is still needed. Both Houston

(1973) and Andrews (1974) indicate that while this type of research is needed, showing a direct relationship between teacher competence and pupil performance is a difficult task because of all the intervening variables that may influence pupil behavior in addition to the teacher's performance.

The modes of assessment and the criterion levels that are to be used in CBTE programs are, or should be, clearly stated in the objectives, typically the module objectives. This approach,according to Houston & Howsam (1972) and Cooper, Weber & Johnson (1973) is criterion-referenced, in contrast to the traditional norm-referenced approach. More and more emphasis in CBTE programs is being placed on performance and consequence objectives,and therefore assessment is now being conducted in the field setting. Research assessing the appropriateness of this emphasis is currently underway (see Popham, 1974).

The entire issue of assessing competence has been questioned by Hefferman-Cabrera (1974) who feels that the current nature of evaluation is incompatible with humanistic philosophy. She suggests that CBTE can be compatible with humanistic philosophy, but that the nature of evaluation must change to foster the self-determining nature of free man. For her, we must get away from the notion of having to "prove" competence. Since the most important facet of self-determinism is the ability to make decisions for oneself, then a part of control over one's destiny must include the power to evaluate one's own behavior.

While to some this may seem unreasonable, since we currently are unable to objectively evaluate competency, personal subjective evaluation using the criterion as an objective point of comparison might in fact foster self-determination. Dodl (1973) suggests that some method of negotiation between trainee and evaluator is needed to help set criteria so that the program may allow for each trainee's unique

teaching style. Through negotiation the participants make a specific contract for performance and establish the criteria by which performance will be judged.

Since modules are synonomous in most CBTE programs with the instructional strategies, modules must undergo validation. In module evaluation there are two levels of concern according to Laurence & DeNovellis (1974). At one level there must be concern for whether the modules are efficient and effective in helping the trainee attain competency and at another level there must be concern for whether the competency remains in the teacher's on-the-job behavioral repetoire. The latter issue is concerned with the success of a competency orientation which has been discussed above. The former issue is beginning to receive attention, but a recent review by Clark & Gage (1974) indicates that much work is still needed.

Marsh (1973) suggests that the effectiveness of the program objectives for facilitating the objectives for competent teaching cannot be accepted at face value alone. Empirical evidence should be sought to determine if the program is organized most efficiently and effectively for achieving teacher competence. All program components must be questioned. For example, is field-centeredness, personalization, etc.,necessary to achieve competent teachers? Answers to questions like these will help to guide program policy-makers in their decisions about program revision.

Chapter 3

METHODOLOGY

The major purpose of this evaluation was to provide data which would describe the current formative stage of the CDMS program; this descriptive data would then be used to draw conclusions about the program's strengths and weaknesses, and to make suggestions for program revisions. To achieve this, a questionnaire was constructed which was to be completed by participants in the program.

In the early stages of the evaluation, the evaluation team was faced with the task of translating the very broad and general statement of goals of the CDMS program into more specific and measurable characteristics which could be used as a focus for the questionnaire. To help facilitate this task, we conducted interviews with a non-random sample of selected CDMS personnel. The interviews enabled us to categorize the operation of the CDMS program with respect to six basic issues: (1) program orientation, (2) program objectives, (3) communication, (4) role definition, (5) attitudes, and (6) modules.

Program Participants

CDMS program participants are from one of the following colleges or school districts: Cheektowaga School District, D'Youville College, Medaille College, and Sloan School District. The schools participating in the Cheektowaga District are Alexander Elementary, Pine Hill Elementary and Union East Elementary. The schools participating from the Sloan School District are Grover Cleveland Elementary and Theodore Roosevelt Elementary. The elementary schools provide the field setting for the interns from Medaille and D'Youville Colleges.

Personnel receiving questionnaires were those presently participating in the CDMS program and those who had participated in previous semesters but who are no longer in the program; this included citizens on the Policy Board.

Table 1 presents the distribution of returned questionnaires according to CDMS participant groups. In several cases we have combined several groups to make the description of the sample more parsimonious and to facilitate data interpretation. Specifically, co-operating teachers, floating teachers, and field specialists have been combined to form the "Teachers" group. The first and second group of interns have been combined to form a group called "Interns." College instructors and field supervisors have been combined into a group called "College Personnel." The program director and the college and school district administrators have been combined into a new group called "Administrators." The citizen group has been left unchanged.

Table 1A presents the distribution of returned questionnaires according to the new combined groups. The overall response rate for the return of the questionnaire was 78%; the range of response rate for the various groups was between 63% and 93%. The calculated overall rate of response for the return of the questionnaires may be slightly in error, however, due to the program's lack of a concise and thorough list of current and previous participants.

Questions 2-9 of the questionnaire asked for information which is used to help more clearly characterize the CDMS population as represented by the sample obtained.

Table 2 presents the distribution of CDMS program participants who have served or who are currently serving in additional activities. The data indicates that the governing body of CDMS - the Policy Board - is a representative body. Thirty percent of the sample have participated as representatives or alternates to the Policy Board. In fact, a greater percentage of CDMS participants have been involved in the Policy Board than any other activity additional to their primary pro-

gram role.

The table points out that teachers, in terms of absolute number, have had greater representation on the curriculum committee than any other group. This is surprising since college instructors are seen by the CDMS participants as having the major responsibility for developing curriculum (see Table 35).

Table 3-4 shows that the sample that returned questionnaires is fairly representative in terms of the numbers of participants at the respective college or school district.

Table 5-6 indicates that the teachers average over eight years of teaching experience, and that the co-operating teachers have supervised an average of more than three regular student teachers.

Table 7-8 presents the age and sex of CDMS participants. Because of the way the age was scored (into age categories) it was impossible to present an accurate mean. Instead, the age range into which the calculated mean fell is presented. The age standard deviations were rounded from number of five-year categories to whole numbers of five years.

Table 9 points out the growth in the CDMS program from the Spring of 1971 with only twelve participants, to the Spring of 1974 when there were 80 (these numbers are in terms of this sample and may not be accurate in terms of the actual CDMS population).

Interviews

The evaluation team conducted interviews with approximately 30 participants, selected from all levels of the program, in order to gather information on which to base the development of the questionnaire. A basic list of interview questions used is included in the appendix. A cover letter to all program participants (see appendix)

preceded the evaluation interviewers to explain the purpose of the interviews and the entire evaluation. Two members of the evaluation team were present at each interview, allowing questions both to be asked and thoroughly discussed, and recorded as completely as possible. The participants interviewed were assured that any statements concerning the program would be used solely to formulate questions for a general questionnaire to be completed by all CDMS participants and that they would not be quoted in the evaluation report.

Questionnaire

A questionnaire was developed to obtain additional information concerning the six basic issues which had been formulated as a result of the interviews.

The questionnaire (see appendix) consisted of 66 items. Three of the items were open-ended. Thirty-two were Likert-type items, with a four-point scale - Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD), and a category for no response due to lack of information or non-applicability - N.A. Other items were multiple-choice or ranking.

Procedure

Questionnaires intended for co-operating teachers, principals, and interns still in their field experiences, and for field supervisors, college instructors and interns at the colleges, were individually placed in clasp envelopes with the intended receiver's name on the outside. Cover letters containing both explanations and instructions were included (see appendix). School principals and one professor at each college were asked to be responsible for distribution and collection of the majority of the questionnaires.

Questionnaires were mailed to those who could not be reached through the schools or colleges. Enclosed in the envelope mailed were (1) the questionnaire,

(2) questionnaire cover letter, (3) a self-addressed (to the evaluators) stamped envelope, (4) a self-addressed stamped post card, (5) a cover letter (see appendix) explaining what to do with all enclosed material. The respondent was asked to sign and return the post card after returning the completed questionnaire, so that a record could be kept as to who had responded, but anonymity was still assured for the respondent.

Follow-up phone calls were made to those schools, colleges, and personnel not heard from within two weeks of the initial delivery and mailing date.

Data Analysis

Descriptive statistics, primarily means, standard deviations, and percent responding, were used to analyze the questionnaire data.

Table 1

Distribution of CDMS Program Participants
Responding to Questionnaire

Participant Group	N	% of Total
Citizens	3	2.9
College Administrators	3	2.9
College Instructors	7	6.8
Co-operating Teachers	31	30.2
Field Specialists	2	1.9
Field Supervisors	3	2.9
Floating Teachers	7	6.8
Interns	37	35.9
Program Director	1	1.0
School District Administrators	9	8.7
Total Sample	103	

Table 1A

Distribution of CDMS Program Participants
Responding to Questionnaire By Combined Categories

Participant Group	N	Combined Category	N	% of Total
Co-operating Teachers	31			
Field Specialists	2	Teachers	40	38.8
Floating Teachers	7			
Interns	37	Interns	37	35.9
College Instructors	7	College		
Field Supervisors	3	Personnel	10	9.7
College Administrators	3			
Program Director	1	Administrators	13	12.6
School District Administrators	9			
Citizens	3	Citizens	3	2.9
Total Sample	103		103	

Table 2

Distribution of CDMS Program Participants[a]
Serving in Additional Activities

Activity		Participant Groups[b] Teachers (40)	Interns (37)	College[c] Personnel (10)	Admin.[d] (13)	Citizens (3)	Total (103)
Policy Board	(N)	(5)	(9)	(6)	(8)	(2)	(30)
	% of Group	12.8	24.3	60.0	72.7	66.7	30.0
Curriculum Comm.	(N)	(7)	(5)	(4)	(3)	(0)	(19)
	% of Group	17.9	13.9	40.0	27.3	0.0	19.2
Certification Comm.	(N)	(2)	(6)	(1)	(1)	(0)	(10)
	% of Group	5.1	16.7	10.0	9.1	0.0	10.1
Ways & Means Comm.	(N)	(0)	(0)	(0)	(3)	(0)	(3)
	% of Group	0.0	0.0	0.0	27.3	0.0	3.0
Social Comm.	(N)	(3)	(4)	(0)	(1)	(0)	(8)
	% of Group	7.7	11.1	0.0	9.1	0.0	8.1
Program Design Comm.	(N)	(3)	(1)	(2)	(1)	(0)	(7)
	% of Group	7.7	2.8	20.0	9.1	0.0	7.1
Other	(N)	(3)	(3)	(2)	(1)	(0)	(9)
	% of Group	7.7	8.3	20.0	9.1	0.0	9.1

a Participants currently serving or who have served previously.

b Participant Groups have been combined for analysis into 5 groups.

c College Instructors and Field Supervisors.

d College and School District Administrators. This category includes the Program Director.

Table 3-4

College or School District Association of CDMS Participants

		Colleges			School Districts	
Group	(N) % of Group	Medaille	D'Youville	(N) % of Group	Cheektowaga	Sloan
Teachers	(0)			(39)	(16) 41.0	(23) 59.0
Interns	(37)	(23) 62.2	(14) 37.8	(0)		
College Personnel	(10)	(9) 90.0	(1) 10.0	(0)		
Admin.	(3)	(1) 33.3	(2) 66.7	(9)	(6) 66.7	(3) 33.3
Citizens	(0)			(0)		
Total	(50)	(33) 66.7	(17) 33.3	(48)	(22) 45.8	(26) 54.2

Table 5-6

Years Teaching Experience, Tenure, and Number of Regular Student Teachers and/or Intern Teachers Assigned

Group	(N) % of Group	Years Teach. Exp. Mean	SD	(N)	Tenure Yes	Tenure No	(N)	Student Teachers Mean	SD	(N)	Interns Mean	SD
Teachers[a]	(38)	8.34	6.25	(39)	(28) 71.8	(11) 28.2						
Co-operating Teachers							(22)	3.55	2.98	(30)	2.10	.98
Floating Teachers										(3)	6.00	0.0
College Personnel	(10)	20.90	12.45	(8)	(1) 12.5	(7) 87.5						

a Includes Co-operating Teachers, Floating Teachers and Field Specialists

Table 7-8

Age and Sex of CDMS Participants

Group	(N)	Age Mean[a]	SD[b]	(N) % of Group	Sex Male	Female
Teachers	(35)	26-30	10	(38)	(6) 15.8	(32) 84.2
Interns	(36)	21-25	5	(37)	(3) 8.1	(34) 91.9
College Personnel	(9)	41-45	10	(9)	(2) 22.2	(7) 77.8
Admin.	(13)	41-45	5	(13)	(8) 61.5	(5) 38.5
Citizens	(2)	31-35	5	(2)	(0) 0.0	(2) 100.0
Total	(95)	26-30	10	(99)	(19) 19.2	(80) 80.8

a The age category means are represented by the age categories within which they fall.

b Standard deviations were converted from category standard deviations to standard deviations presented as a multiple of five years.

Table 9

Periods of Participation in CDMS

		% Participating									
		1971			1972			1973			1974
Group	(N)	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring
Teachers	(39)	(5) 12.8	(7) 17.9	(7) 17.9	(10) 25.6	(5) 12.8	(11) 28.2	(18) 46.2	(1) 2.6	(23) 59.0	(34) 87.2
Interns	(37)	(0) 0.0	(0) 0.0	(0) 0.0	(0) 0.0	(0) 0.0	(0) 0.0	(15) 40.5	(2) 5.4	(13) 35.1	(23) 62.2
College Personnel	(10)	(1) 10.0	(0) 0.0	(2) 20.0	(4) 40.0	(5) 50.0	(5) 50.0	(7) 70.0	(4) 40.0	(9) 90.0	(9) 90.0
Admin.	(13)	(6) 46.2	(4) 30.8	(7) 53.8	(10) 76.9	(8) 61.5	(9) 69.2	(12) 92.3	(7) 53.8	(12) 92.3	(11) 84.6
Citizens	(3)	(0) 0.0	(0) 0.0	(0) 0.0	(0) 0.0	(0) 0.0	(0) 0.0	(0) 0.0	(0) 0.0	(2) 66.7	(3) 100.0
Total	(102)	(12) 11.8	(11) 10.8	(16) 15.7	(24) 23.5	(18) 17.6	(25) 24.5	(52) 51.0	(14) 13.7	(59) 57.8	(80) 78.4

Chapter 4

RESULTS

In this chapter are presented the extensive findings from the questionnaire which was distributed to the CDMS program participants. The text, in general, summarizes the findings for each question, and attempts to point out what appear to be the more important results. The tables present the data as analyzed by the combined subgroups of respondents. The table numbers are keyed to the numbers corresponding to the items on the questionnaire. In some cases, the results of two items have been combined into one table, in which case the table will be double-numbered (e.g. Table 7-8). In other cases, an adaptation of a table's results will be presented in an extra table, labeled with a letter in addition to the table number (e.g. Table 1A).

General comments and discussion about the findings will follow in the next chapter.

The data from questions 1-9 are presented in Chapter 3, since they basically describe the sample of respondents.

The most common reasons for participating in the CDMS program, as seen in Table 10, were a belief in the program concepts and a liking for the novelty of experimental programs. Of interest is that 25% of the teachers are participating "as a favor to someone else." No other group selected this reason. In addition, fewer teachers believe in the program concepts than any other group.

When this table is considered in relation to Table 12, it seems apparent that other than intrinsic factors, such as program novelty, will be necessary to keep teachers in the program.

While only a small number (15.7%) of the CDMS participants were initially prepared for participation in the program by written materials, as seen in Table 11,

more than 75% of the sample thought that the most appropriate method of preparation for teachers and interns was a handbook (see Table 23). In addition, while only 13.7% of the participants received no preparation, almost all (96%) of the participants thought that more preparation was needed for teachers and interns (Table 23).

Table 12 indicates that most (88.9%) of the CDMS participants will continue in CDMS in the future. Inspection of the table shows, however, that approximately 11% of the participants who will not continue are not evenly divided among the various groups. Specifically, 100% of the citizens, administrators, and college personnel will continue, while 5.6% of the interns will not continue, and in particular, almost one quarter of the teachers will not continue.

More than half the CDMS participants thought that co-operating teachers were not adequately prepared to work with "interns" as opposed to working with student teachers. Table 13 indicates that even the teachers themselves agreed (79%) that they were not adequately prepared for interns. The interns, however, disagreed; more than 62% of the interns thought that teachers were prepared to work with them.

While almost half (47.2%) the interns agreed that they were adequately prepared for their experience in the classroom, Table 14 shows that only 28.7% of the teachers agreed that they were adequately prepared. (Tables 46 and 56 provide specific information regarding the type of experiences that might better prepare the intern for the classroom.)

Inspection of Table 15 makes it clear that for at least teachers, interns, and citizens, orientation for participation in CDMS was inadequate. (Table 12 presents the manner in which respondents were prepared and Table 23 presents the methods that are felt to be most appropriate.)

Although the objectives of CDMS do not seem to be readily available in written

form to the program participants, more than 85% of them thought the objectives of CDMS are clear. The overwhelming percentage of agreement in Table 16 raises an important question: exactly what objectives are clear to the participants?

Table 17 indicates that 71.1% of the participants agree that CDMS seems to be achieving its major objectives (as they are understood by each participant). It is unfortunate that participants were not asked what they thought were the objectives of CDMS. The most negative group was the teachers, while the most positive group was the citizens. All the groups, except the teachers, had more than 75% of their members in agreement that the program seems to be achieving its major objectives, while only 45.7% of the teachers agreed.

While the majority (70.7%) of CDMS participants see no conflict between the objectives of their school/college and the CDMS program objectives, more than a third of the teachers, and nearly that many of the college personnel and interns, do perceive a conflict (Table 18).

More than 72% of the teachers perceive a conflict between their job-related priorities and the demands required by the program. This information, presented in Table 19, might be interpreted to mean that the time teachers spend with interns takes away from the time they have available to spend with their class or in preparation.

No other group perceives as large a conflict as that reported by the teachers. Forty percent of the administrators do perceive a conflict, which may be related to an increasing responsibility that is being assumed by these individuals for CDMS activities.

Table 20-21A is easier to interpret than Table 20-21 and should be referred to except where specific information is required. This table presents the rankings

for elements thought to be important for any competency-based teacher education program in general, and for actual emphasis placed on the elements in the CDMS program.

Except for modularized instruction, no CBTE element differs in its CDMS ranking by more than three ranks. The CDMS participants rank modularized instruction last in importance among the 11 elements listed for importance to a CBTE program in general. Modularized instruction, however, is ranked number 3 for actual emphasis placed on the elements in the CDMS program. Since modularized instruction is not a defining characteristic of CBTE, as pointed out in Chapter 2, the reason for this emphasis should be further explored. This discrepancy is large for all the groups, except for citizens, but is largest for teachers who are most responsible for signing of the modules (see Table 35).

A specific discrepancy of interest for the teachers is the ranks for the element that "criteria to be employed in assessing competencies make explicit expected levels of mastery under specified conditions." The teachers are probably most aware of a lack of explicitness because they carry major responsibility for evaluating the modules. The teachers rank this element 9th in importance in the CDMS program, but they think it should have much greater emphasis (rank 3).

The largest discrepancy for the students occurs for the element that "student's progress is determined by demonstrated competence, rather than by time or course completion." Students feel that not enough emphasis is currently being placed on this element.

College instructors and field supervisors see too much emphasis being placed on field-centeredness. Table 46, however, does not seem to support this finding in that the college personnel do not favor completion of modules before the field ex-

periences to a greater extent than do other CDMS participants.

Table 22 indicates that participants perceive the school district as having assumed a greater share of the responsibility in the preparation of the student interns than they had under previous programs of teacher education.

CDMS participants believe that more preparation is needed by teachers and interns, as presented in Table 23. A handbook is the most frequently selected method of preparation for both teachers and interns, except in one instance. Interns select having the program explained more thoroughly by participants in CDMS. An initiation meeting held during the first week of the semester is selected next most frequently as a method of preparing teachers; however, the teachers select a more thorough explanation next most frequently for themselves.

The majority (64.6%) of participants think there is a systematic method for dissemination of program information (Table 24). A large portion of the teachers and interns, however, disagree with this statement (33.4% and 54.6% respectively).

Most (82%) of the participants would find regular meetings with other CDMS personnel helpful, as indicated by Table 25.

Over three-fourths of the respondents are clear about who can help them with problems regarding aspects of the CDMS program (Table 26). More than a quarter of the teachers and interns, however, reported that it was not clear who could help them; this appears to be a large enough percentage to be concerned about. In the accompanying Table 26A, the number of people turning to particular others for help regarding the program is presented. The primary burden for problem-solution appears to lie with the co-operating teachers and field supervisors. Those two groups, in turn, seem to rely on the program director (particularly the college group) and the principals (to whom the teachers turn secondarily).

According to Table 27, 76.9% of the participants feel the lines of communication are well-defined and clearly understood. The teachers and the interns deviate from the group as a whole; the majority think that the lines of communication are not well-defined or clearly understood.

While Table 28 indicates that the majority of people (60.6%) think that the lines of communication are easily accessible, it can be seen from Table 29 that fewer (46.0%) participants actively use these lines of communication.

The number of hours per week spent in program-related activities is shown in Table 30. Over 25% spend more than 20 hours, most of which is accounted for by the interns. Over 40% of the teachers spend more than 5 hours, while 25% of the college instructors and field supervisors spend that much time. The majority of the school administrators spend under three hours a week in CDMS activities. Most participants spend their time in the school classroom, and college personnel, when working on CDMS activities, are usually on the college campuses (see Table 31).

There is strong agreement, as shown in Table 32, that the CDMS program requires more time than other methods of teacher preparation.

Table 33 presents findings from a question which asked respondents to rank order their three most time-consuming activities in the program. The teachers spend the majority of their time observing, planning and preparing lessons, and evaluating completed modules. The interns' time is primarily consumed by planning lessons, teaching on a formal basis, and completing modules. The college personnel are mainly either teaching or observing, with three other activities splitting third place: evaluating modules, planning lessons, and participating on the Policy Board. The administrators spend most of their CDMS time in verbal communication and committee and Policy Board participation.

Those activities which are considered to have the highest priorities for four groups of the program participants, as perceived by the entire group, are shown in Table 34. For interns, teaching is perceived as the most important concern. Observing and evaluating completed modules is perceived as the highest priority for the co-operating teachers. The college instructors' most important tasks are evaluating modules, formal teaching, and talking to other program members. With a different emphasis, the field supervisors are considered to have the same priorities, with high agreement that their primary concern should be observation.

There is relatively strong agreement, as shown in Table 35-36, between who is perceived to have the responsibility for particular activities, and who it is thought should have the responsibility. The only activity which shows a large discrepancy is "Helping solve the interns' problems"; the teachers and supervisors are seen as holding a large responsibility for that currently, but a majority seem to think that task should fall to the supervisors and program director. An important note: out of 18 CDMS activities, almost half (7) are seen to be the primary responsibility of the co-operating teachers. That is a large percentage considering there are at least five other subgroups which have program-related responsibilities.

Table 37 shows that more than half the CDMS participants feel isolated from other program members; the groups that feel this most strongly are the citizens, the college personnel, and the co-operating teachers.

Attitudes of participants toward the CDMS program, both on entering the program and currently, are shown in Table 38-39. The teachers appear more neutral or negative; the interns seem more positive, as are the college personnel. The school administrators appear to have felt positive all along, and the citizens who responded seem to have changed their attitudes to the positive side.

Findings from a question intended primarily for the co-operating teachers are presented in Table 40. (It is remarkable to note that 20% of the interns think they should have some remuneration for participating in the program that is training them!) An important finding is that more than 60% of the co-operating teachers think remuneration is necessary for continuing in the program. A rank order of the types of remuneration preferred is presented in Table 41, with the most preferred being money.

Most program participants think that their ideas and criticisms are taken seriously (Table 42). Predictably, the majority of the school administrators think this is true. It should be noted, however, that between 40-50% of the interns and co-operating teachers do not think their ideas are seriously considered.

Almost 70% of the CDMS respondents now feel committed to the program, as shown in Table 43. Looking at the percentages among the subgroups, however, we see that over one-half of the co-operating teachers do not feel committed (that would mean, in numbers, about 20 teachers who are not committed to the program).

Table 44 shows that the majority of the participants, if they had to make the decision again about being in the program, would do so.

Changes that participants think should be made in the modules are shown in Table 45. Over half think that some modules should be eliminated, and the quality of some modules should be improved; more than a third think the nature of the modules should be changed.

Ranking highest in the list of those modules which participants thought should be completed before the field experience (see Table 46) were the Psychology of Learning (70.1%), Audio-visual (69.1%), and Interaction in the Classroom (42.3%). No other module was selected by more than a third of the respondents. Only 2%

thought that no modules should be completed before the field experience.

Three groups are perceived by most of the participants as being able to evaluate and sign modules, as seen in Table 47: teachers, college instructors, and field supervisors.

Over half the respondents think modules are not essential to a program in competency-based education (Table 48).

Almost a third (31.3%) of the participants think module completion is more important than other work in the classroom, as seen in Table 49. There is strong agreement among administrators, however, that module completion is not more important than other work in the classroom (84.6%). The way this question was worded makes interpretation of the results difficult; this will be discussed in the next chapter.

It is clear from Table 50 that almost all of the interns and teachers are more committed to the classroom program than to module completion.

There is indication in Table 51 that the participants are divided in their opinion that the modules allow for interns' individual working and learning style. A majority of the teachers and interns do not think the modules allow for individuality, while most of the college instructors and supervisors think that the modules do allow for individual learning style.

A majority (52.8%) of the interns spend more than 10 hours a week completing modules, as shown in Table 52.

In Table 53 is presented the amount of time participants, other than interns, spend reading, observing and evaluating modules. One quarter of the teachers spend more than six hours evaluating modules, while more than 40% of the college instructors and supervisors spend an hour or less.

Most of the participants (88.2%) think the interns are aware of their progress in the program with regard to completion of their modules (Table 54).

Most (93%) think some methods courses should be taken before the intern goes into the field experience, as indicated in Table 55. This reconfirms the data of Table 46.

Almost everyone (99%) thought interns should have more preparation prior to entering the field experience (Table 56). Although only 35% felt more preparation was needed in school routine, between 65% to 86% of the participants felt more preparation was needed in all other options.

Table 57 indicates that 58% of the participants think that modules should be written to include routine classroom procedures. The main dissenting group was the college personnel, the majority of whom thought such material should not be written into modules.

In Table 58, we see that over two-thirds of teachers and half the college professors think that interns are not prepared to conduct themselves in an acceptably professional manner. A majority of interns, however, think they are prepared to conduct themselves acceptably.

A majority think the interns should not be required to stay in their field position until the end of the public school year. Inspection of subgroups shows that almost three-fourths of the interns think it should not be a requirement, but an almost equal percentage of administrators think it should be.

One of the most crucial findings (Table 60) is that three-quarters (75.8%) of the total group of respondents think that successful completion of the modules does not indicate that the intern will be a competent teacher. However, one-third of the college personnel group thinks that successful completion does indicate competence.

Not quite one-half of the total group thinks that first-semester interns should be assigned with a second-semester intern for the purpose of peer learning (Table 61). Most of the teachers and over half of the interns disagree with this idea, while most of the college personnel and administrators agree with it.

Over half (58.4%) think that the quality of performance for completion of a module is not clearly stated (Table 62).

Table 63 indicates that over half (57.5%) of the participants think it is not more meaningful to have the interns have methods courses simultaneously with their field experience than to have them previous to their field experience. Three-quarters of the teachers felt this way.

Results regarding strengths and weaknesses of the program from questions 64 and 65 seem to bear out, on the whole, the results from the other sections on the questionnaire, so it appears redundant to present them again.

Comments have been drawn from question 66 because of their uniqueness and because they were not detected from the answers in the questionnaire. We include them because they may serve as ideas or suggestions to think about at some point.

Personnel

One respondent thought that the program director had been able to tie a lot of loose ends together. Regarding the college instructors, one person said that they were not prepared for helping to relate the course theory to classroom applications. Another commented that the field supervisors were too "pie-in-the-skyish" and that they should not be idealistic in their position. Another person said that the interns and co-operating teachers were affected most by the decisions, but that their opinions did not really count.

Modules

The main comment from one person regarding modules was that the module work should be changed to fit the actual needs of the students, that they needed direction but could not be going "in twenty directions at once." In addition, this person expressed that the college teachers needed to give more help "in determining week-by-week needs and incorporating these needs into the interns' courses."

Courses

One person thought that more methods courses were needed. Another said a course in testing should be required, and also "a participation course in behavior modification."

CDMS Program

A positive and a negative comment here: one respondent said that the program placement allowed the interns to work in all grade levels and areas. Another commented that the program was too suburban and that the interns lacked exposure to the city teaching system.

Table 10

Reasons for Participating in the CDMS Program

Reasons	% of Group Selecting Reason					
	Teachers (N=40)	Interns (N=37)	College Personnel (N=10)	Admin. (N=13)	Citizens (N=3)	Total (N=103)
I believe in the program concepts.	32.5	59.5	50.0	46.2	33.3	45.6
I had no alternative.	5.0	18.9	20.0	7.7	0.0	11.7
This type of program seems inevitable.	10.0	5.4	30.0	30.8	0.0	12.6
CDMS will provide better job opportunities for me.	2.5	48.6	10.0	0.0	0.0	19.4
I did it as a favor to someone else.	25.0	0.0	0.0	0.0	0.0	9.7
I like to become involved in new and experimental programs.	55.0	13.5	50.0	38.5	33.3	36.9
Other	7.5	13.5	20.0	23.1	33.3	13.6

Note--No limit was placed on the number of reasons selected.

Table 11

Method of Initial Preparation for Participation in the CDMS Program

Methods	% of Group Selecting Method					
	Teachers (N=40)	Interns (N=37)	College Personnel (N=10)	Admin. (N=12)	Citizens (N=3)	Total (N=102)
At a formal meeting.	35.0	37.8	60.0	41.7	0.0	38.2
Informally by someone who is in the CDMS program.	12.5	16.2	50.0	16.7	33.3	18.6
Informally by the principal of my school.	30.0	2.7	0.0	0.0	33.3	13.7
By means of written materials.	7.5	10.8	50.0	25.0	33.3	15.7
By fellow students.	0.0	8.1	0.0	0.0	0.0	2.9
By a college professor.	0.0	45.9	0.0	0.0	0.0	16.7
By a field supervisor.	2.5	8.1	0.0	0.0	0.0	3.9
There was no form of preparation.	10.0	13.5	0.0	25.0	66.7	13.7
Other	12.5	5.4	30.0	16.7	0.0	11.8

Note--No limit was placed on the number of methods selected.

Table 12

If At All Possible, I Will Participate in CDMS in the Future

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(38)	18.4	57.9	15.8	7.9
Interns	(36)	61.1	33.3	2.8	2.8
College Personnel	(10)	70.0	30.0	0.0	0.0
Admin.	(12)	75.0	25.0	0.0	0.0
Citizens	(3)	33.3	66.7	0.0	0.0
Total	(99)	46.5	42.4	7.1	4.0

Table 13

The Co-operating Teachers Were Adequately Prepared to Work With Interns as Opposed to Working With Student Teachers

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(38)	0.0	21.1	47.4	31.6
Interns	(37)	10.8	51.4	18.9	18.9
College Personnel	(6)	0.0	33.3	50.0	16.7
Admin.	(13)	0.0	61.5	30.8	7.7
Citizens	(1)	0.0	100.0	0.0	0.0
Total	(95)	4.2	40.0	33.7	22.1

Table 14

The Interns are Adequately Prepared for Their Experiences in the Classroom

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(35)	2.9	25.7	42.9	28.6
Interns	(36)	2.8	44.4	44.4	8.3
College Personnel	(10)	0.0	60.0	30.0	10.0
Admin.	(12)	8.3	58.3	16.7	16.7
Citizens	(2)	0.0	100.0	0.0	0.0
Total	(95)	3.2	42.1	37.9	16.8

Table 15

Orientation for Participation in CDMS was Adequate

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(39)	2.6	25.6	53.8	17.9
Interns	(37)	8.1	32.4	35.1	24.3
College Personnel	(6)	0.0	66.7	33.3	0.0
Admin.	(12)	0.0	75.0	25.0	0.0
Citizens	(3)	33.3	0.0	0.0	66.7
Total	(97)	5.2	36.1	40.2	18.6

Table 16

The Objectives Of CDMS Are Clear To Me

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(40)	12.5	72.5	12.5	2.5
Interns	(37)	18.9	59.5	18.9	2.7
College Personnel	(9)	33.3	66.7	0.0	0.0
Admin.	(13)	38.5	61.5	0.0	0.0
Citizens	(3)	33.3	33.3	33.3	0.0
Total	(102)	20.6	64.7	12.7	2.0

Table 17

CDMS Seems To Be Achieving Its Major Objectives As I Understand Them

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(35)	5.7	40.0	48.6	5.7
Interns	(37)	13.5	70.3	8.1	8.1
College Personnel	(9)	11.1	66.7	22.2	0.0
Admin.	(13)	38.5	53.8	0.0	7.7
Citizens	(3)	33.3	66.7	0.0	0.0
Total	(97)	14.4	56.7	22.7	6.2

Table 18

There is a Conflict Between the Objectives of My School/College and the Objectives of the CDMS Program

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(32)	3.1	34.4	50.0	12.5
Interns	(37)	10.8	18.9	43.2	27.0
College Personnel	(10)	0.0	30.0	20.0	50.0
Admin.	(11)	0.0	9.1	54.5	36.4
Citizens	(2)	0.0	0.0	0.0	100.0
Total	(92)	5.4	23.9	43.5	27.2

Table 19

There is a Conflict Between My Job Related Priorities and the Demands Required by the CDMS Program

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(36)	13.9	58.3	25.0	2.8
Interns	(29)	6.9	13.8	55.2	24.1
College Personnel	(9)	22.2	0.0	33.3	44.4
Admin.	(10)	10.0	30.0	40.0	20.0
Citizens	(0)	0.0	0.0	0.0	0.0
Total	(84)	11.9	33.3	38.1	16.7

Table 20-21

Mean Rankings for Elements Thought to be Important for Any Competency Based Teacher Education (CBTE) Program in General and for Actual Emphasis Placed on the Elements in the CDMS Program

		Rankings											
		Teachers (N=21-28)		Interns (N=30-36)		College Personnel (N=5-8)		Administrators (N=11-12)		Citizens (N=0-3)		Total (N=72-86)	
Elements		CBTE	CDMS	CBTE	CDMS	CBTE	CDMS	CBTE	CDMS	CBTE	CDMS	CBTE	CDMS
1 - Competencies (knowledge, skills, and the behaviors) to be demonstrated by graduates are stated so as to make possible assessment of student's behavior in relation to specified competencies.	M	3.11	4.42	4.21	3.88	3.88	4.67	2.67	2.92	2.00	1.50	3.53	3.90
	SD	2.06	3.32	2.73	2.41	2.15	3.20	1.70	1.85	1.00	0.50	2.39	2.77
2 - Criteria to be employed in assessing competencies make explicit expected levels of mastery under specified conditions.	M	3.96	6.64	5.88	5.24	4.13	7.00	4.00	5.17	2.00	2.50	4.74	5.71
	SD	2.31	3.10	2.46	2.50	2.26	2.52	1.83	2.64	0.00	0.50	2.49	2.83
3 - Assessment of student's competence uses his performance as the primary source of evidence.	M	3.46	4.83	3.31	3.83	2.71	3.33	4.25	4.50	5.33	7.00	3.51	4.27
	SD	2.11	2.81	1.52	2.28	1.39	1.89	2.31	2.78	2.36	0.00	1.95	2.56
4 - Student's progress is determined by demonstrated competence, rather than by time or course completion.	M	4.04	5.79	3.25	4.83	3.75	5.00	4.08	5.92	3.50	5.50	3.67	5.31
	SD	2.57	2.47	2.06	2.69	1.71	2.38	2.22	3.25	2.50	0.50	2.27	2.71

Continued Next Page

Table 20-21 (Continued)

Rankings

Elements		Teachers (N=21-28) CBTE	Teachers (N=21-28) CDMS	Interns (N=30-36) CBTE	Interns (N=30-36) CDMS	College Personnel (N=5-8) CBTE	College Personnel (N=5-8) CDMS	Administrators (N=11-12) CBTE	Administrators (N=11-12) CDMS	Citizens (N=0-3) CBTE	Citizens (N=0-3) CDMS	Total (N=72-86) CBTE	Total (N=72-86) CDMS
5 - Emphasis on exit, not entrance requirements	M	7.62	5.71	8.63	7.82	4.83	5.20	8.73	6.82	6.50	10.00	7.97	6.90
	SD	3.05	3.37	2.10	3.08	1.95	2.64	2.26	2.82	3.50	0.00	2.71	3.26
6 - Field centered.	M	5.63	4.96	3.72	4.11	6.29	3.00	4.91	4.64	6.00	6.00	4.77	4.41
	SD	3.02	2.49	2.81	2.77	2.86	1.83	2.68	2.80	3.00	3.00	3.04	2.70
7 - Personalized, individualized instruction.	M	6.37	6.87	5.22	6.72	4.67	7.40	4.50	6.58	8.00	8.00	5.49	6.81
	SD	2.48	2.52	2.79	2.73	2.98	2.87	2.47	1.50	0.00	0.00	2.75	2.52
8 - Modularized instruction.	M	8.20	3.14	8.00	4.72	10.29	5.00	8.50	5.67	4.50	2.50	8.24	4.40
	SD	3.12	2.80	2.24	2.94	0.70	3.46	2.22	3.52	0.50	1.50	2.58	3.16
9 - Multi-institutional pattern of organization.	M	7.41	6.22	8.36	7.18	8.57	7.17	8.18	6.42	6.00	6.00	8.00	6.75
	SD	2.56	2.69	2.51	2.17	2.06	2.54	3.21	3.80	0.00	0.00	2.63	2.70
10 - Formative feedback to student regarding his progress.	M	6.41	5.55	6.72	8.31	6.71	7.33	7.17	6.92	3.33	4.50	6.56	7.14
	SD	2.47	2.55	2.18	2.15	2.49	1.80	2.30	2.10	1.70	0.50	2.40	2.54
11 - Pre-service -- in-service continuum.	M	6.19	7.45	7.20	8.43	7.50	9.50	8.33	8.33	----	----	7.07	8.20
	SD	3.20	3.55	2.71	2.59	3.12	1.12	1.70	2.66	----	----	2.90	2.92

Note--N for each group represents the range of respondents for the 11 elements.

Table 20-21A

Rankings for Elements Thought to be Important for Any Competency Based Teacher Education (CBTE) Program in General and for Actual Emphasis Placed on the Elements in the CDMS Program

Elements	Rankings											
	Teachers (N=21-28)		Interns (N=30-36)		College Personnel (N=5-8)		Administrators (N=11-12)		Citizens (N=0-3)		Total (N=72-86)	
	CBTE	CDMS	CBTE	CDMS	CBTE	CDMS	CBTE	CDMS	CBTE	CDMS	CBTE	CDMS
1 - Competencies (knowledge, skills and the behaviors) to be demonstrated by graduates are stated so as to make possible assessment of student's behavior in relation to specified competencies.	1	2	4	2	3	3	1	1	1.5	1	2	1
2 - Criteria to be employed in assessing competencies make explicit expected levels of mastery under specified conditions.	3	9	6	6	4	7	2	4	1.5	2.5	4	6
3 - Assessment of student's competence uses his performance as the primary source of evidence.	2	3	2	1	1	2	4	2	6	8	1	2
4 - Student's progress is determined by demonstrated competence, rather than by time or course completion.	4	7	1	5	2	4.5	3	6	4	5	3	5

Continued Next Page

Table 20-21A (Continued)

Rankings

Elements	Teachers (N=21-28)		Interns (N=30-36)		College Personnel (N=5-8)		Administrators (N=11-12)		Citizens (N=0-3)		Total (N=72-86)	
	CBTE	CDMS	CBTE	CDMS	CBTE	CDMS	CBTE	CDMS	CBTE	CDMS	CBTE	CDMS
5 - Emphasis on exit, not entrance requirements.	10	6	11	9	6	6	11	9	9	10	9	9
6 - Field centered.	5	4	3	3	7	1	6	3	7.5	6.5	5	4
7 - Personalized, individualized instruction.	7	10	5	7	5	10	5	8	10	9	6	8
8 - Modularized instruction.	11	1	9	4	11	4.5	10	5	5	2.5	11	3
9 - Multi-institutional pattern of organization.	9	8	10	8	10	8	8	7	7.5	6.5	10	7
10 - Formative feedback to student regarding his progress.	8	5	7	10	8	9	7	10	3	4	7	10
11 - Pre-service -- in-service continuum.	6	11	8	11	9	11	9	11	---	---	8	11

Note--N for each group represents the range of respondents for the 11 elements.

Table 22

The School District has More Responsibility in CDMS Than Under Previous Programs of Teacher Education

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(38)	47.4	50.0	2.6	0.0
Interns	(32)	31.3	50.0	15.6	3.1
College Personnel	(8)	75.0	25.0	0.0	0.0
Admin.	(13)	92.3	7.7	0.0	0.0
Citizens	(3)	0.0	100.0	0.0	0.0
Total	(94)	48.9	43.6	6.4	1.1

Table 23

Appropriate Methods of Preparation for Participation in the CDMS Program for Interns and Teachers (if More Preparation is Needed)

Methods	Teachers (N=37-40) Int.	Teachers (N=37-40) Teach.	Interns (N=33-37) Int.	Interns (N=33-37) Teach.	College Personnel (N=10) Int.	College Personnel (N=10) Teach.	Administrators (N=11-12) Int.	Administrators (N=11-12) Teach.	Citizens (N=2) Int.	Citizens (N=2) Teach.	Total (N=95-99) Int.	Total (N=95-99) Teach.
	% of Group Selecting Method											
No more orientation is needed.	7.9	5.1	2.7	0.0	0.0	0.0	0.0	0.0	0.0	50.0	4.0	3.2
Explained more thoroughly by participants in CDMS.	31.6	27.5	83.8	54.5	40.0	30.0	50.0	50.0	100.0	50.0	55.6	40.2
A concise handbook covering pertinent aspects of the program.	68.4	77.5	78.4	72.7	70.0	70.0	91.7	83.3	100.0	50.0	75.8	75.3
A workshop held during the summer.	28.9	25.0	24.3	36.4	30.0	30.0	25.0	45.5	50.0	0.0	27.3	31.3
An initiation meeting held during the first week of the semester.	44.7	50.0	59.5	51.5	60.0	50.0	50.0	45.5	50.0	0.0	52.5	49.0
Several days of orientation just prior to the beginning of the semester.	50.0	30.8	59.5	27.3	50.0	30.0	50.0	36.4	100.0	50.0	54.5	30.5
Other	8.1	5.1	16.2	24.2	0.0	10.0	0.0	0.0	0.0	0.0	9.3	11.6

Note--No limit was placed on the number of methods selected. N for each group represents the range of respondents for the 7 methods.

Table 24

A Systematic Method for Information Dissemination Exists

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(36)	11.1	55.6	30.6	2.8
Interns	(33)	6.1	39.4	36.4	18.2
College Personnel	(10)	10.0	80.0	10.0	0.0
Admin.	(24)	25.0	58.3	16.7	0.0
Citizens	(2)	0.0	100.0	0.0	0.0
Total	(93)	10.8	53.8	28.0	7.5

Table 25

Regular Meetings With CDMS Personnel

Group	(N)	% Responding SA	A	D	SD
Teachers	(38)	28.9	52.6	7.9	10.5
Interns	(37)	35.1	45.9	18.9	0.0
College Personnel	(10)	10.0	50.0	30.0	10.0
Admin.	(12)	8.3	9.7	0.0	0.0
Citizens	(3)	0.0	100.0	0.0	0.0
Total	(100)	26.0	56.0	13.0	5.0

Table 26

Clear Who Can Help With Problems
Regarding the Program

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(18)	11.1	61.1	22.2	5.6
Interns	(23)	17.4	56.5	17.4	8.7
College Personnel	(5)	80.0	20.0	0.0	0.0
Admin.	(5)	60.0	20.0	20.0	0.0
Citizens	(1)	100.0	0.0	0.0	0.0
Total	(52)	26.9	50.0	17.3	5.8

Table 26A

Positions of First Two People to Whom Participants Turn for Help Regarding Problems with the Program

Group	Number of people selecting each position of "helper"							
	Program director	College administrators	Interns	Co-operating teachers	Field supervisors	College instructors	Principals	School Supts.
Teachers	13	0	1	8	23	1	17	1
Interns	7	0	2	35	25	1	0	0
College Personnel	5	0	0	0	1	3	2	0
School Administrators	6	2	0	2	4	3	0	1
Total[a]	29	2	3	47	53	8	22	2

Note--The number of people choosing each helper was obtained by summing across first and second choices.

[a] Total number may not equal the numbers within categories because some respondents chose only one helper. N=87 on first choice, N=81 on second choice.

Table 27

Lines of Communication are Well-Defined

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(39)	5.1	41.0	51.3	2.6
Interns	(37)	5.4	29.7	45.9	18.9
College Personnel	(10)	10.0	60.0	10.0	20.0
Admin.	(12)	8.3	66.7	25.0	0.0
Citizens	(3)	0.0	100.0	0.0	0.0
Total	(52)	26.9	50.0	17.3	5.8

Table 28

Lines of Communication Easily Accessible

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(38)	2.6	52.6	44.7	0.0
Interns	(37)	13.5	35.1	48.6	2.7
College Personnel	(9)	44.4	33.3	11.1	11.1
Admin.	(12)	16.7	75.0	8.3	0.0
Citizens	(3)	0.0	100.0	0.0	0.0
Total	(99)	12.1	48.5	37.4	2.0

Table 28-29

Percentage of CDMS Participants Indicating Easy Access to the Lines of Communication Compared to those Participants that Actually Use those Lines

	Easy Access to Lines		Use Lines	
	Yes	No	Yes	No
Teachers	55.2	44.7	34.2	65.8
Interns	48.6	51.3	48.6	51.3
College Personnel	77.7	22.2	75.0	25.0
Admin.	91.7	8.3	66.7	33.3
Citizens	100.0	0.0	33.3	66.7
Total	60.6	39.4	46.9	53.0

Table 29

Use of Lines of Communication

Group	(N)	% Responding			
		Very Often	Often	Rarely	Never
Teachers	(38)	2.6	31.6	52.6	13.2
Interns	(37)	8.1	40.5	48.6	2.7
College Personnel	(8)	0.0	75.0	25.0	0.0
Admin.	(12)	16.7	50.0	25.0	8.3
Citizens	(3)	0.0	33.3	66.7	0.0
Total	(98)	6.1	40.8	45.9	7.1

Table 30

Time/Week Spent in CDMS Activities in Hours

		% Responding						
Group	(N)	1 or less	1-3	3-5	6-10	11-15	16-20	20 or more
Teachers	(40)	15.0	22.5	20.0	30.0	7.5	0.0	5.0
Interns	(36)	0.0	0.0	2.8	11.1	13.9	11.1	61.1
College Personnel	(8)	12.5	25.0	37.5	12.5	12.5	0.0	0.0
Administrators	(12)	25.0	50.0	16.7	0.0	0.0	0.0	8.3
Citizens	(3)	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	(99)	13.1	17.2	14.1	17.2	9.1	4.0	25.3

Table 31

Where Most Time Spent Involving CDMS Activities

Group	(N)	% Responding: College Campus	School Classroom	School, other than Classroom	Home	Other
Teachers	(38)	2.6	76.3	18.4	2.6	0.0
Interns	(36)	5.6	77.8	2.8	11.1	2.8
College Personnel	(9)	66.7	22.2	0.0	11.1	0.0
Administrators	(12)	16.7	0.0	66.7	0.0	16.7
Citizens	(3)	0.0	0.0	33.3	0.0	66.7
Total	(98)	11.2	60.2	17.3	6.1	5.1

Table 32

CDMS Requires More Time Than Other
Teacher Preparation Methods

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(32)	46.9	34.4	9.4	9.4
Interns	(30)	76.7	13.3	10.0	0.0
College Personnel	(9)	55.6	11.1	22.2	11.1
Admin.	(9)	44.4	44.4	0.0	11.1
Citizens	(0)	0.0	0.0	0.0	0.0
Total	(80)	58.8	25.0	10.0	6.3

Table 33

Rankings for CDMS Activities
According to Amount of Time Spent in that Activity

Group	(N)		Activity: Evaluating Completed Modules	Completing Modules	Observing Students or Teachers	Doing library research	Planning & preparing lessons	Teaching on a formal basis	Teaching on an informal basis	Talking to other program members	Committee or policy board participation	Other
Teachers	(34)	M	1.03	.09	1.79	0.0	1.26	.41	.24	.74	.21	.09
		SD	.82	.37	1.13	0.0	1.38	.94	.69	.98	.63	.51
Interns	(37)	M	.03	1.59	.27	.32	1.92	1.46	.38	.08	0.0	0.0
		SD	.16	1.15	.64	.81	1.02	1.00	.85	.49	0.0	0.0
College Personnel	(9)	M	.67	0.0	1.22	.33	.67	1.44	.33	.22	.67	0.0
		SD	.94	0.0	1.40	.94	1.05	1.26	.67	.63	.94	0.0
Administrators	(12)	M	0.0	0.0	.42	0.0	0.0	.08	.33	2.33	1.58	.50
		SD	0.0	0.0	.95	0.0	0.0	.28	.75	.85	1.11	.96
Total	(95)	M	.44	.65	.95	.16	1.26	.86	.31	.63	.43	.09
		SD	.75	1.06	1.19	.60	1.28	1.10	.75	1.05	.93	.48

Table 34

CDMS Activity Priorities (Total N)

	% Responding	Activity
For interns:		
Highest priority: (N=91)	42.9	teaching on a formal basis
	35.2	planning and preparing lessons
Next highest priority: (N=90)	36.7	teaching on a formal basis
	21.1	teaching on an informal basis
For co-operating teachers:		
Highest priority: (N=87)	36.8	observing students or teachers
	18.4	planning and preparing lessons
	18.4	teaching on a formal basis
Next highest priority: (N=87)	37.9	evaluating completed modules
	21.8	observing students or teachers
For college instructors:		
Highest priority: (N=81)	21.0	evaluating completed modules
	19.8	teaching on a formal basis
	18.5	talking to other program members
Next highest priority: (N=80)	32.5	evaluating completed modules
	20.0	talking to other program members
For field supervisors:		
Highest priority: (N=81)	67.9	observing students or teachers
	17.3	talking to other program members
Next highest priority: (N=80)	37.5	evaluating completed modules
	35.0	talking to other program members

Table 35-36

Participants' Perceptions of Those Who Do Have and Those Who Should Have the Major Responsibility for the Following Activities (N)[a]

Activity	Has responsibility now	%[b]	Should have responsibility	%
Evaluating and signing modules	Co-operating teachers	71.3	Co-operating teachers	74.7
	College instructors	23.4	College instructors	19.8
Completion of modules	Interns	91.5	Interns	89.1
Overseeing module completion	Co-operating teachers	32.3	Field supervisors	35.9
	Field supervisors	31.2	Co-operating teachers	32.6
	College instructors	12.9	College instructors	13.0
Record-keeping on module completion	Interns	59.6	Interns	60.9
	Field supervisors	20.2	Field supervisors	18.5
Teaching interns about teaching	Co-operating teachers	54.3	Co-operating teachers	45.1
	College instructors	31.9	College instructors	41.8
Making decisions about program changes	Policy board members	54.3	Policy board members	53.8
	Program director	25.0	Other	16.5
			Program director	15.4
Implementing program changes	Program director	45.2	Program director	39.8
	Policy board members	26.9	Policy board members	23.9
Structuring and facilitating intern/teacher relationships	Field supervisors	38.3	Field supervisors	43.3
	Program director	24.5	Program director	25.6
	Co-operating teachers	17.0	Co-operating teachers	11.1

Continued Next Page

Table 35-36 (Continued)

Activity	Has responsibility now	%[b]	Should have responsibility	%
Determining needs of interns	Co-operating teachers	46.2	Co-operating teachers	44.0
	College instructors	15.1	College instructors	17.6
	Field supervisors	14.0	Field supervisors	15.4
Overseeing intern/ pupil relationships	Co-operating teachers	78.7	Co-operating teachers	82.6
	Field supervisors	13.8	Field supervisors	12.0
Determining CDMS program objectives	Policy board members	54.3	Policy board members	51.6
	Program director	14.1	Other	15.4
	Other	10.9	Program director	12.1
Determining module objectives	College instructors	37.0	Other	28.3
	Other	19.6	College instructors	27.2
	Policy board members	18.5	Co-operating teachers	18.5
			Policy board members	14.1
Helping solve interns' problems	Co-operating teachers	33.3	Field supervisors	40.9
	Field supervisors	32.3	Program director	22.7
	Program director	19.4	Co-operating teachers	18.2
Helping solve co-operating teachers' problems	Program director	34.4	Program director	40.7
	Field supervisors	23.7	Field supervisors	29.1
	School superintendents	11.8	School superintendents	10.5
	Do not know who has the major responsibility	10.8		
Monitoring program's needs	Program director	69.1	Program director	65.9
	Policy board members	18.1	Policy board members	20.5
Facilitating program communication	Program director	62.2	Program director	70.1
	Field supervisors	10.0		

Continued Next Page

Table 35-36 (Continued)

Activity	Has responsibility	%[b]	Should have responsibility	%
Evaluating interns' teaching abilities	Co-operating teachers	69.6	Co-operating teachers	70.3
	Field supervisors	19.6	Field supervisors	18.7
Instructing interns about educational theory	College instructors	76.9	College instructors	83.9
	Co-operating teachers	13.2	Co-operating teachers	11.5

[a] N ranges from 88 to 94.

[b] All percentages over 10% are reported.

Table 37

Feel Isolated From Other CDMS Personnel

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(37)	8.1	62.2	29.7	0.0
Interns	(35)	8.6	34.3	40.0	17.1
College Personnel	(9)	11.1	55.6	11.1	22.2
Admin.	(12)	8.3	16.7	50.0	25.0
Citizens	(3)	66.7	33.3	0.0	0.0
Total	(96)	10.4	44.8	33.3	11.5

Table 38-39

Entering and Current
Attitudes Toward CDMS Program

Group (N)	% Responding				
	Strongly Positive	Positive	Neutral	Negative	Strongly Negative
Teachers					
(39) entered	17.9	41.0	33.3	7.7	0.0
(40) current	2.5	32.5	32.5	22.5	10.0
Interns					
(35) entered	25.7	37.1	20.0	17.1	0.0
(37) current	40.0	37.8	8.1	5.4	8.1
College Personnel					
(10) entered	0.0	40.0	50.0	0.0	10.0
(10) current	10.0	70.0	0.0	20.0	0.0
Administrators					
(13) entered	38.5	30.8	30.8	0.0	0.0
(13) current	38.5	46.2	0.0	7.7	7.7
Citizens					
(3) entered	0.0	0.0	66.7	33.3	0.0
(3) current	33.3	33.3	33.3	0.0	0.0
Total					
(100) entered	21.0	37.0	31.0	10.0	1.0
(103) current	22.3	39.8	16.5	13.6	7.8

Table 40

Additional Remuneration is Necessary
For Continuing in the Program

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(33)	15.2	48.5	30.3	6.1
Interns	(30)	13.3	6.7	40.0	40.0
College Personnel	(9)	0.0	11.1	44.4	44.4
Admin.	(6)	0.0	0.0	66.7	33.3
Citizens	(3)	0.0	0.0	100.0	0.0
Total	(81)	11.1	23.5	37.0	28.4

Table 41

Types of Remuneration Preferred

	Mean[a]	SD
Specified amount of money	2.18	1.06
Tuition waiver	1.56	1.21
Time free from teaching	1.02	.90

a highest = most preferred.

Table 42

My Ideas and Criticisms Are Taken Seriously

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(36)	0.0	52.8	38.9	8.3
Interns	(34)	11.8	44.1	35.3	8.8
College Personnel	(8)	50.0	25.0	25.0	0.0
Admin.	(13)	30.8	61.5	7.7	0.0
Citizens	(3)	0.0	100.0	0.0	0.0
Total	(94)	12.8	50.0	30.9	6.4

Table 43

Feel Committed to CDMS Program

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(39)	0.0	48.7	30.8	20.5
Interns	(35)	20.0	57.1	14.3	8.6
College Personnel	(9)	44.4	44.4	11.1	0.0
Admin.	(12)	50.0	33.3	16.7	0.0
Citizens	(3)	33.3	33.3	33.3	0.0
Total	(98)	18.4	49.0	21.4	11.2

Table 44

Would Re-make Same Decision About Participating in the Program

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(37)	0.0	59.5	29.7	10.8
Interns	(33)	45.5	36.4	3.0	15.2
College Personnel	(10)	50.0	40.0	10.0	0.0
Admin.	(12)	41.7	50.0	8.3	0.0
Citizens	(3)	33.3	66.7	0.0	0.0
Total	(95)	27.4	48.4	14.7	9.5

Table 45

Most Important Changes to be Made in Modules

Group	(N)	% Selecting Type of Change: No Change	Eliminate Some Modules	Reduce Module Length	Improve Quality of Some Modules	Change the Nature of the Modules
Teachers	(33)	6.1	42.4	9.1	45.5	51.5
Interns	(35)	0.0	77.1	20.0	68.6	37.1
College Personnel	(8)	12.5	62.5	0.0	37.5	37.5
Administrators	(10)	10.0	10.0	40.0	60.0	20.0
Citizens	(2)	100.0	0.0	0.0	0.0	0.0
Total	(88)	6.8	53.4	15.9	54.5	39.8

Note--No limit was placed on number of changes selected.

Table 46

Modules to be Completed Before Field Experience

Group	(N)	% Selecting Modules											
		none	interaction in classroom	art education	audio visual	language arts education	math education	music education	psychology of learning	reading	science education	social studies education	other
Teacher	(38)	2.6	50.0	13.2	52.6	13.2	21.1	5.3	78.9	28.9	7.9	10.5	23.7
Interns	(34)	2.9	20.6	55.9	94.1	2.9	5.9	50.0	50.0	20.6	5.9	5.9	14.7
College Personnel	(9)	0.0	66.7	11.1	55.6	22.2	11.1	11.1	66.7	33.3	11.1	22.2	11.1
Administrators	(13)	0.0	46.2	23.1	61.5	15.4	23.1	15.4	92.3	53.8	15.4	15.4	7.7
Citizen	(3)	0.0	100.0	0.0	66.7	66.7	33.3	0.0	100.0	66.7	33.3	33.3	0.0
Total	(97)	2.1	42.3	28.9	69.1	12.4	15.5	22.7	70.1	30.9	9.3	11.3	16.5

Table 47

Persons Responsible for Evaluation
and Signing of Modules

Group	(N)	% Selecting Program Participant						
		Program Director	School Superintendent	Co-operating Teachers	College Instructor	Field Supervisor	Interns	Other
Teachers	(39)	23.1	5.1	97.4	74.4	76.9	7.7	7.7
Interns	(36)	16.7	0.0	100.0	100.0	91.7	5.6	8.3
College Personnel	(9)	11.1	0.0	66.7	88.9	66.7	11.1	11.1
Administrators	(13)	15.4	0.0	100.0	76.9	92.3	7.7	0.0
Citizen	(2)	0.0	50.0	100.0	0.0	0.0	0.0	0.0
Total	(99)	18.2	3.0	96.0	85.9	81.8	7.1	7.1

Note--No limit was placed on the number of program participants selected.

Table 48

Essentiality of Modules to CBTE

Group	(N)	% Responding			
		Very Essential	Essential	Somewhat Essential	Not Essential
Teachers	(39)	7.7	38.5	41.0	12.8
Interns	(36)	8.3	36.1	44.4	11.1
College Personnel	(10)	30.0	30.0	20.0	20.0
Administrators	(13)	23.1	30.8	38.5	7.7
Citizens	(2)	100.0	0.0	0.0	0.0
Total	(100)	14.0	35.0	39.0	12.0

Table 49

Importance of Module Completion
vs. Other Work in Classroom

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(39)	7.7	25.6	33.3	33.3
Interns	(36)	11.1	19.4	47.2	22.2
College Personnel	(9)	0.0	33.3	44.4	22.2
Admin.	(13)	0.0	15.4	53.8	30.8
Citizens	(2)	50.0	50.0	0.0	0.0
Total	(99)	8.1	23.2	41.4	27.3

Table 50

Module Work Suffers Because of
Commitment to Classroom Program

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(9)	44.4	44.4	0.0	11.1
Interns	(36)	27.8	52.8	19.4	0.0
College Personnel	(1)	0.0	100.0	0.0	0.0
Admin.	(0)	0.0	0.0	0.0	0.0
Citizens	(0)	0.0	0.0	0.0	0.0
Total	(46)	30.4	52.2	15.2	2.2

Table 51

Modules Allow for Individuality

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(38)	0.0	36.8	52.6	10.5
Interns	(35)	14.3	31.4	31.4	22.9
College Personnel	(9)	33.3	44.4	22.2	0.0
Admin.	(0)	0.0	0.0	0.0	0.0
Citizens	(2)	50.0	50.0	0.0	0.0
Total	(96)	11.5	38.5	36.5	13.5

Table 52

Average Time Spent
on Modules by Interns

	% Responding						
	1 hour or less	1-3 hours	3-5 hours	5-8 hours	8-10 hours	10-15 hours	over 15 hours
N=36	0.0	8.3	8.3	13.9	16.7	22.2	30.6

Table 53

Time Spent by Participants Other Than Interns Reading/Observing/Evaluating Modules

		% Responding						
Group	(N)	none	1 hour or less	1-5 hours	6-10 hours	11-15 hours	16-20 hours	over 20 hours
Teachers	(30)	10.0	13.3	50.0	20.0	6.7	0.0	0.0
College Personnel	(7)	0.0	42.9	42.9	0.0	0.0	0.0	14.3
Administrators	(5)	40.0	20.0	40.0	0.0	0.0	0.0	0.0

Table 54

Interns' Aware of Their Completion of Modules

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(35)	5.7	80.0	14.3	0.0
Interns	(36)	36.1	47.2	13.9	2.8
College Personnel	(9)	44.4	55.6	0.0	0.0
Admin.	(11)	27.3	72.7	0.0	0.0
Citizens	(2)	0.0	100.0	0.0	0.0
Total	(93)	23.7	64.5	10.8	1.1

Table 55

Methods Courses Should Be Taken Before Field Experience

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(39)	59.0	38.5	2.6	0.0
Interns	(36)	61.1	30.6	5.6	2.8
College Personnel	(9)	44.4	22.2	11.1	22.2
Admin.	(13)	53.8	46.2	0.0	0.0
Citizens	(3)	66.7	33.3	0.0	0.0
Total	(100)	58.0	35.0	4.0	3.0

Table 56

Type of Preparation Interns Need Prior to Field Experience

		% Responding						
Group	(N)	no more preparation is needed	competencies in behavioral objectives	lesson planning	unit planning	classroom management	school routine	knowledge about discipline techniques	other
Teacher	(39)	0.0	71.8	89.7	74.4	61.5	33.3	74.4	12.8
Interns	(36)	0.0	77.8	86.1	83.3	58.3	25.0	83.8	16.7
College Personnel	(9)	11.1	44.4	77.8	66.7	55.6	33.3	77.8	0.0
Administrators	(13)	0.0	84.6	84.6	61.5	92.3	61.5	69.2	15.4
Citizen	(3)	0.0	66.7	66.7	66.7	100.0	66.7	100.0	0.0
Total	(100)	1.0	73.0	86.0	75.0	65.0	35.0	78.0	13.0

Table 57

Substance of Modules Should Include
Routine Classroom Procedures

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(39)	12.8	43.6	25.6	17.9
Interns	(36)	25.0	33.3	27.8	13.9
College Personnel	(9)	22.2	11.1	22.2	44.4
Admin.	(13)	23.1	46.2	15.4	15.4
Citizens	(3)	33.3	66.7	0.0	0.0
Total	(100)	20.0	38.0	24.0	18.0

Table 58

Interns Conduct Themselves Professionally
When Entering Field Experience

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(39)	5.1	25.6	53.8	15.4
Interns	(35)	20.0	45.7	17.1	17.1
College Personnel	(8)	12.5	37.5	50.0	0.0
Admin.	(12)	8.3	50.0	33.3	8.3
Citizens	(3)	33.3	66.7	0.0	0.0
Total	(97)	12.4	38.1	36.1	13.4

Table 59

Interns Remain in Field Position
Until End of Public School Year

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(35)	14.3	28.6	42.9	14.3
Interns	(36)	8.3	22.2	38.9	30.6
College Personnel	(9)	11.1	11.1	33.3	44.4
Admin.	(13)	46.2	23.1	23.1	7.7
Citizens	(2)	0.0	0.0	100.0	0.0
Total	(95)	15.8	23.2	38.9	22.1

Table 60

Module Completion Indicates Teacher Competency

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(40)	0.0	17.5	27.5	55.0
Interns	(34)	0.0	29.4	41.2	29.4
College Personnel	(9)	0.0	33.3	33.3	33.3
Admin.	(13)	0.0	23.1	53.8	23.1
Citizens	(3)	33.3	0.0	66.7	0.0
Total	(99)	1.0	23.2	37.4	38.4

Table 61

First Semester Intern Placed with Second Semester Intern

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(34)	5.9	11.8	41.2	41.2
Interns	(34)	8.8	32.4	35.3	23.5
College Personnel	(9)	22.2	55.6	22.2	0.0
Admin.	(11)	18.2	72.7	0.0	9.1
Citizens	(3)	0.0	100.0	0.0	0.0
Total	(91)	9.9	34.1	30.8	25.3

Table 62

Criteria for Module Completion is Clear

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(38)	0.0	34.2	52.6	13.2
Interns	(36)	5.6	41.7	38.9	13.9
College Personnel	(8)	0.0	37.5	62.5	0.0
Admin.	(12)	0.0	50.0	41.7	8.3
Citizens	(2)	50.0	0.0	50.0	0.0
Total	(96)	3.1	38.5	46.9	11.5

Table 63

Methods Courses Simultaneously
With Field Experience

		% Responding			
Group	(N)	SA	A	D	SD
Teachers	(36)	2.8	22.2	55.6	19.4
Interns	(35)	14.3	40.0	25.7	20.0
College Personnel	(9)	44.4	11.1	44.4	0.0
Admin.	(12)	16.7	33.3	50.0	0.0
Citizens	(2)	0.0	50.0	50.0	0.0
Total	(94)	12.8	29.8	42.6	14.9

Chapter 5

DISCUSSION

The organization of the discussion of the evaluation findings will in general follow the outline of the questionnaire subject headings. Those results which seem most immediately crucial for program revision will be emphasized. Following these headings is a section summarizing the major strengths and weaknesses of the CDMS program as perceived by the evaluators from the data.

The numbers following the headings are keyed to the numbers of the tables on which the discussion is based.

Program orientation and preparation (11-15, 23, 55, 56, 58, 63)

It was clear from the findings that the orientation of the participants to the program was sparse and unsystematic; from Table 11 we see that a fairly large number were prepared at a formal meeting, but there were several other ways in which substantial numbers were initiated. In Table 23 we note that there was high agreement on the issue that both interns and teachers need more preparation, with a concise handbook ranking top on the list of preparation methods. Overall, the majority agreed that the orientation was not adequate (Table 15), with the teachers and interns again feeling most strongly about this. The large percentage agreeing that orientation was adequate is accounted for by the administrators and college personnel--those groups near the "top" of the program bureaucracy, who probably have much greater access to information in general about CBTE theory and practice and who also are probably the least affected by the day-to-day difficulties of the program implementation.

We think there are two important aspects of the general program orientation at this point: (1) systemization of both the substance of the program information and of its method for dissemination, and (2) the clarity of the information. At this

still-early stage of the program's development, it would seem relatively impossible to systematize the information about the program, since that information changes so rapidly; on the other hand, there are some concepts, theory, objectives, etc., that will probably remain basic to the program (see in particular the discussion on program objectives) and which could begin to be systematically disseminated, and probably should be, according to the expressed orientation needs of the participants. How the information is disseminated could also begin to be carried out methodically as well; a good start might be a handbook containing those basic concepts mentioned above. However, it would be a mistake, we think, to systematize too early regarding all the ways of introducing participants to the program; a number of ways could be tried, and feedback should be obtained on the effectiveness of each method.

The second point is that the information which is clear should be definitely communicated at the outset of the participants' involvement in the program. It would also be helpful to distinguish between what is clear about program technicalities, and what is still unclear and in developmental stages.

Intern Preparation for the Program

With regard to utmost efficient learning and practice in a field experience as complicated as teaching, sufficient previous academic training, both substantively and methodologically, is very necessary. We think that the training of the interns in CDMS before the field experience is insufficient; the CDMS participants, on the whole, agree. A majority thought that the interns were not adequately prepared (Table 14), and the teachers were in very high agreement on this point. Almost everyone thought that the methods courses should be taken before the field experience (Table 55), and Table 56 indicates the types of preparation needed--only one person thought that no more preparation was necessary.

This lack of preparation may be detrimental on several counts: (1) Overburdening the co-operating teachers. As discussed in other sections of this chapter, the teachers' primary job is to educate their pupils, not the interns. What they have given to the program so far has been voluntary, and too many demands, particularly unnecessary ones (e.g., teaching lesson planning skills) in all likelihood will cut this motivation short. (2) Anxiety for the interns. These students in all probability enter the field experience with no personal teaching philosophy or teaching skills, or even with any training in observational skills for self-teaching. Certainly the teaching philosophy and particular teaching skills will change over the duration of the internship, and hopefully over the teaching years. However, realizing the difficulties of the transition even from successful student teacher to a full-fledged teacher with one's own class, we cannot help but believe (and we saw and heard some evidence for this conclusion in the interviews with the interns) that the little preparation given to the CDMS interns prior to their field experience causes anxiety which could be mitigated by better preparation. (3) No one single person having the full responsibility for the quality of learning that the program produces for the individual interns. When no one has this responsibility, we hypothesize that a likely result is less quality. In CDMS, the liability of this seems greater, because the responsibility for the quality of the interns' learning can be placed on the modules. The director is primarily responsible for the program implementation. The college professors, except for the field supervisors, seem to rely heavily on the modules. The field supervisors have many students (more than five) under their guidance, and they seem to concentrate on problem-solving and facilitating relationships. We think there is no substitute for personal, professional, and individual guidance and teaching for learning the methods and theories; this cannot be the full responsibility

of the co-operating teachers, nor can the burden be placed on the modules. Some one, or some group, needs to take the responsibility for (and not merely have input to) each individual "whole" teacher which the program produces.

An important distinction needs to be made here (which will be further discussed in the section on Modules) between the preparation needed before the field experience and that training which occurs during the internship. Completing "methods courses" before teaching in the field is the traditional orientation toward student teaching. The purpose of the field experience in a competency-based field-centered program is that the learning of performance objectives become performance-based (i.e. no longer is the assumption made that since the intern knows set theory, he or she can teach it to third graders). Those modules which have knowledge-based objectives (and there are many in the CDMS program; see in particular the math component) could--and should--be completed before the internship, so that during the field experience the emphasis is on teacher performance behaviors.

Objectives (16-22)

It is important that a clear distinction is made between the objectives for the CDMS program and the objectives for the interns in the program. The objectives for the CDMS program should clearly state how the program is to be organized. The objectives for the interns should list the knowledge, skills, behaviors, and attitudes that are necessary for a competent teacher.

Before an effective program can be designed, the product must be clearly defined; that is, the designers of a teacher education program must first clearly conceptualize the role of teacher. It is from this conceptualization that broad goals and more specific behavioral objectives for the competent teacher can be written.

The development of the program objectives for a teacher education program is

similar to the development of the behavioral objectives for a competent teacher. The program objectives are formulated to enable the program to achieve its product or goal--a competent teacher.

According to Johnson & Shearron (1973) the goals for interns in the program should reflect what is known about effective teaching and also parallel the beliefs and needs of the community the program is to serve. Goals for effective teaching could therefore differ from program to program. In addition, to better facilitate their respective goals for effective teaching, the organization from one teacher education program to another might differ.

Johnson & Shearron (1973) state that most teacher education programs today, however, have not developed a set of goals for effective teaching. The authors go on to state that until this is done, there can be no clear understanding of what types of teachers are to be produced by the program, nor will it be possible to determine the degree of consistency between the goals for the interns and the specific objectives written to achieve these goals.

It should be clear that the program designers should find the task of organizing the program facilitated by the prior development of the goals and objectives for competent teachers--the program product. Of major importance to the program developers is that they remain cognizant of the fact that a teacher education program is only a means for obtaining the desired product--competent teachers--and should not be considered as an end in itself.

The CDMS program has module objectives and a list of teacher competencies. The list of teacher competencies is presented in the appendix. A list of component objectives--objectives for a restricted aspect of the curriculum, which contain many modules--has been placed in the appendix instead of the module objectives

because no list of the module objectives was available. Neither of these lists, however, has its roots in a published list of goals for competent teachers. This lack of a basic conceptualization of the role of competent teacher has left CDMS without a holistic perspective--a concept of a competent teacher--from which objectives and goals for intern learning can arise. This is not to say that none of the objectives or competencies are meaningful, or even that most are not.

Another important factor is that there must be some consistency between the goals and objectives. The objectives or competencies for effective teaching must be consistent with both the goals for effective teachers and with each other. According to Johnson & Shearron (1973), "if this internal consistency does not exist, the program will be schizophrenic in nature and may produce conflicting messages to all involved in the program" (p. 44).

While the literature search (see Chapter 2) revealed that there is currently a paucity of information about what characterizes an effective teacher, the program designers must still constantly strive for more precise definitions of the product of their program. The goals for competent teachers could be arrived at by considering what we do know about effective teaching, not only from research but also from the experience of the program designers.

A task analysis of teaching roles and the outcomes desired for the elementary students might help to formulate the goals for competent teachers. The task analysis enables the role of the teacher to be conceptualized. This is accomplished by itemizing the tasks performed by a teacher. The list can be developed by actually observing several teachers, or it can be composed from the experience of those involved with the task analysis who may speculate upon the relevant tasks that teachers may perform.

Another approach for developing the goals for competent teachers that can be used either separately or in conjunction with the other methods suggested, focuses on the outcomes desired for the elementary school pupils. This approach requires that the user speculate as to what teacher goals will be able to foster the conditions that will bring about the desired pupil outcomes (see Houston, 1973). This approach for arriving at goals for competent teachers lacks the empirical support of, but employs the same paradigm used in, teacher effectiveness research, the difference being that in the approach presented here, speculation is used instead of experimentation. The use of this approach by CDMS would be facilitated because a list of objectives for the elementary school child has already been developed (see appendix).

If there is consistency between the goals and module objectives (or competencies), an intern successfully completing the modules should become a competent teacher as defined by the program. This was not the opinion of over 75% of the CDMS participants who disagreed with the statement that "successful completion of the modules indicates that the intern will be a competent teacher" (see Table 60). Since this is an indication of program success, i.e., the program is producing competent teachers, it would seem that the program designers would want at least 75% of the CDMS participants to agree that successful completion of the modules does result in competent teachers.

From our prespective, the most obvious explanation is that since the program designers have not conceptualized the role of competent teacher, the program participants can see no connection between module completion and competent teacher.

Another reason for the lack of agreement that completion of the modules indicates the intern will be a competent teacher, related to the first, is that the modules do not include all the requirements to be a competent teacher. That is, using

their own definition of teaching, the CDMS participants are concluding that the modules do not include all the knowledge, skills, behaviors, and attitudes that are necessary for the competent teacher. This should not indicate that less emphasis should be placed on the modules, but rather that more time must be spent on writing a set of module objectives which include the teacher competencies thought important for effective teaching.

We feel that the major headings of the CDMS program's list of teacher competencies (see appendix) could be used to help develop a list of goals for competent teachers. The Policy Board, with input from its constituencies, could use their list of teacher competencies to help formulate a conceptualization of the role of the competent teacher. Many of the major headings would probably be included as goals, while some might be eliminated because they no longer agree with what is thought to be a competent teacher, or are not considered important by the community the program is to serve. Added to the list of goals might be others that are not suggested by the list of teacher competencies. For example, competency II might be listed as a goal which would state that a competent teacher should be able to establish proper classroom climate. An example of a goal for competent teachers which is not suggested by the list of teacher competencies is: a competent teacher employs teaching behaviors that will assist each pupil to acquire a positive attitude toward school and the learning process. An analysis would then have to be performed to determine if the list of competencies continues to be consistent with the goals. Some competencies would probably be added while others are eliminated. The module objectives would then be written directly from the competencies for teachers. The module behavioral objectives would differ from the competencies because they would be written in behavioral objective form, facilitating the development of the

modules and module evaluation (see Johnson & Shearron, 1973).

A review of the module objectives shows that modules are not available for all of the teacher competencies. Specifically, it appears that most of the module objectives deal with teaching performance (IV-B), instructional media (V-B), and several additional competencies which are related to the psychology of learning component. It seems clear that additional modules will have to be written to cover competencies for which no modules have been written. For example, while the list of teacher competencies includes lesson planning and unit planning (III-B2, B3), no modules have been devised to provide instruction in these skills. In addition, no modules have been written to provide instruction so that the intern will be able to arrange the classroom facilities to provide for optimum learning, and attend to factors of ventilation, lighting and temperature which are stated as teacher competencies (II-D1, D2). This might necessitate the re-ordering of module priorities and lead to the elimination of other modules. It is hoped that this process will help to make the module objectives more consistent with the competencies and goals for competent teachers, and that more CDMS participants would agree that completion of the modules by the intern indicates that the intern will be a competent teacher.

While we have no data to support this conclusion, the clustering of the competencies for teachers is a positive aspect of the program because according to Houston (1973), "it enables the program developer to progressively focus on more restricted and more specific aspects of the curriculum, thus eliminating the hopelessly diffuse problem of simultaneously dealing with specific objectives for the total curriculum" (p. 202).

A similar comment can be made about the clustering of the modules. The

rationale for such ordering of the modules comes from several sources according to Houston (1973). One rationale uses Gagné's work on learning, and clusters so as to place modules in a hierarchical structure, using content as a guide, from simple notions to complex principles. Another rationale for clustering is placing modules together that can be completed in the same location and/or using the same facilities. For instance, knowledge objectives can be placed together in on cluster, while performance objectives are placed in another. One major advantage to the clustering of modules is that modules may be pyramided; that is, modules with less complex objectives can be clustered together and then serve as prerequisites to more complex modules. This is certainly a positive aspect of the program and should be continued. As new modules are written and others eliminated, clusters should be rearranged to accommodate the changes in the modules.

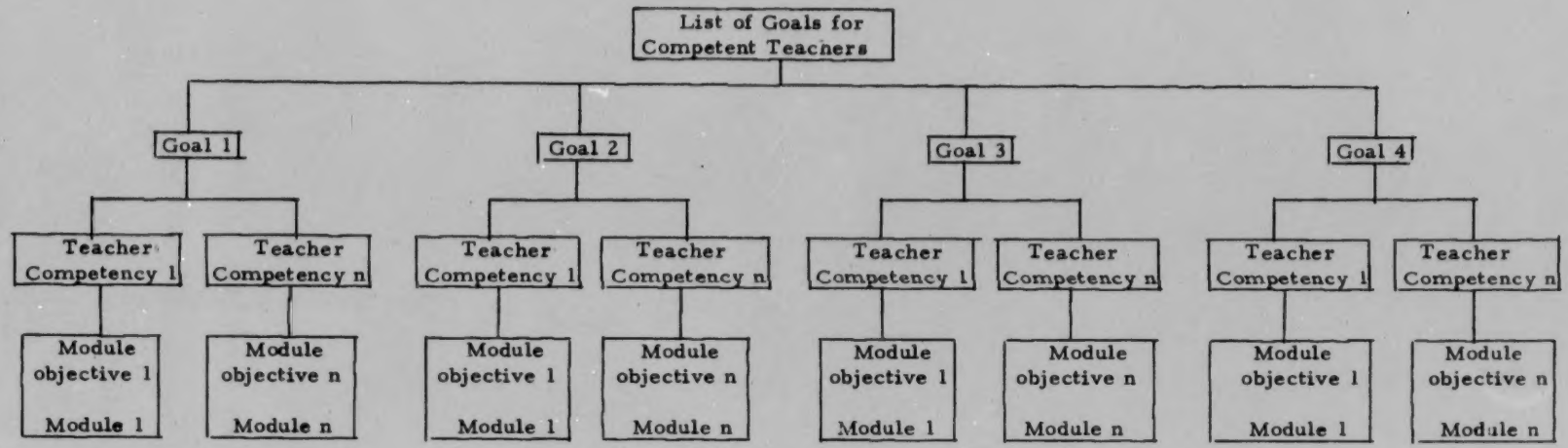
In summary, the scheme we would propose (adapted from Johnson & Shearron, 1973, p. 49), for the development of goals for competent teachers, teacher competencies, module objectives, and modules is presented in Figure 4. It is important to point out that we have used the term teacher competency to be representative of a particular teacher ability (knowledge, skill, performance, attitude). There should be a one-to-one correspondence between modules and competencies. The module objectives, from which the modules are devised, are identical to the teacher competencies, except that they are written in behavioral objective terms in order to provide direction for instructional development and evaluation.

Program Objectives

While items 16 and 17 of the questionnaire deal with the objectives of CDMS, we cannot be sure whether it is the program objectives, e.g., field-centeredness, or the module objectives, that were inferred by the respondents, because we did

Figure 4

Scheme for the Development of Goals for Competent Teachers, Teacher Competencies, Module Objectives, and Modules (Adapted from Johnson and Shearron, 1973, p. 49)



not include an item in the questionnaire to ascertain which objectives the participant had in mind when responding to the questionnaire items. Without knowing specifically which objectives are being referred to, it is almost impossible to interpret the data reported in Tables 16 and 17. If the evaluation questionnaire is to be used again, it must be revised in this area.

The designers of the CDMS program have developed a list of eleven objectives for the "trial project"; they are included in the write-up of the development of the program (see appendix). These objectives differ from the objectives for effective teaching. Their concern is with effective program organization; that is, these objectives for the teacher education program are concerned with the effective organization of the program so as to facilitate the development of competent teachers.

It is important in any program evaluation, in our opinion, to also question the basic program objectives. Specifically, are the program objectives consistent with and necessary for the accomplishment of their program goal--competent teachers? We consider this issue in the discussion of the objectives.

Taking the program objectives as given, from our analysis it seems that the CDMS program has been achieving several of its objectives and has started to move toward the achievement of others. We must warn, however, that the program must be viewed as a tool and program components should be retained only if they are helping to achieve the product of the program (competent teachers). Formative evaluation of the program components must be initiated to determine if they truly are effective for achieving the product. Summative evaluation should also be initiated to determine if the program as a whole is more efficient than previous methods of teacher education. A short analysis of each of the eleven program objectives follows.

Objective 1--Provide alternate system for certification and plan for competency-based teacher education.

CDMS has provided an alternate system of teacher education which has lead to traditional certification. At one of the participating colleges, we are told, the CDMS program is truly an alternative. Students may select a traditional teacher education format or may choose the CDMS program which is striving to become competency-based. More than 36% of the program participants state that they are participating in CDMS because they like to become involved in new and experimental programs (see Table 10). This is an indication that CDMS might be providing a "real" alternative approach to teacher education. In addition, 67% of the participants agree that they feel very committed to the program (see Table 43).

Table 20-21A presents data which enables us to compare the rankings of elements thought to be important for any competency-based teacher education program in general with the way the same elements are ranked according to actual emphasis placed on them in CDMS. A comparison of the rankings for the actual emphasis placed on these elements in CDMS with the rankings inferred for the elements from the definition of CBTE (see Chapter 2) suggests that CDMS has not yet fully achieved a competency-based orientation. Our comparison does suggest, however, that CDMS has been able to implement a program which has been able to focus in on many of the key elements in a competency-based teacher education (CBTE) program in a very short period of time.

Ideally, according to Chapter 2, elements 1 through 4 should have received rankings between 1 and 4 for their emphasis in CDMS because they are the defining or essential characteristics of a CBTE program in general. It is extremely important to note, however, that the participants did rank the elements in this way for a

CBTE program in general. This is an indication that the participants must have a "feel" for what CDMS is striving for in terms of a CBTE orientation.

It would seem that the program designers need to concentrate on elements two and four. Element 2 deals with the explicitness of the criteria for assessing competencies. This is more thoroughly discussed under Program Objective 2. It is our opinion that element 4, which is concerned with the determination of student progress, is not being emphasized by CDMS because the program is still tied to traditional time schedules (e.g., semesters; 4-year-program to graduate). When scheduling is adapted to meet the demands of the new program we believe that element 4 will be achieved.

Objective 2--Develop comprehensive, competency-based evaluation of prospective teachers.

This is one of the weakest points of implementation. Program participants, especially the teachers, indicate that element 2 (see Table 20-21A), "criteria to be employed in assessing competencies make explicit expected levels of mastery under specified conditions," must receive greater program emphasis. Further evidence for this is found in Table 62. We find that half of the CDMS participants believe that the quality of performance for completion of a module must be more clearly stated. It should be evident that the criterion level for completion of the modules must be clear before the program can achieve the objective of providing competency-based evaluation.

Objective 3--Shift the location of a large portion of professional education from college to school district and provide the school district with an increased share of responsibility.

It is clear that the CDMS program is achieving this objective. More than 92%

of the participants agree that the school district has assumed a greater share of the responsibility in the preparation of the student interns in CDMS than they had under previous programs of teacher education (see Table 22). In addition, teachers, school district administrators and citizens living within the school districts are now represented in the policy-making body of the program which is indicative of shared responsibility.

Objective 4--Combine field experience and theoretical studies to provide more meaningful teacher education--critical link between theory and practice.

While the participants in the program and we agree that this is a positive objective, 93% of the participants believe some methods courses should be taken before the intern goes into the field experience (see Table 55). In addition 99% of the participants believe that some preparation is needed before the field experience (see Table 56).

The most important direct evidence available can be found in Table 63. Less than 43% of the program participants agree that it is more meaningful to have the interns have methods courses simultaneously with their field experience than to have them previous to their field experience.

Our view is that this objective has been misinterpreted. Too much energy has been put into simultaneously having the interns take courses and be in the field without a consideration as to why this should be done. We believe that knowledge objectives should be completed before the field experience, and performance and consequence objectives should be completed in the field. This would be an ideal balance of theory and practice.

Objective 5--Bring fullest resources of colleges and school district together to bear on teacher evaluation.

This is an area which is not receiving the emphasis it should be. In the recommendations chapter we suggest that a research component must be implemented.

Objective 6--Better prepare cooperating teachers and school and college personnel.

We are not exactly sure what this objective is referring to. Specifically, we are not sure for what specific task co-operating teachers and school and college personnel are to be prepared. Our analysis of this objective is based on our assumption that the preparation is for participation in a teacher education program employing a CBTE orientation. No question was asked which would provide information as to whether preparation was better for participation in a teacher education program under CDMS than it was under prior programs. It is obvious, however, that the CDMS program has made an effort to orient all its program participants. Only 13.7% of the participants responded that they had received no form of preparation (see Table 11). Our experience with other more traditional programs of teacher education leads us to conclude that little, if any, orientation for teachers and other participants is held.

The results from several questionnaire items, however, does indicate that this orientation is still insufficient. Table 23 for instance, indicates that more than 96% of the participants feel that more preparation for participation in CDMS is needed by the teachers. In addition, 58.8% of the participants responded that orientation for participation in CDMS was inadequate for them (see Table 15).

Objective 7--Strengthen teacher preparation by establishing behavioral objectives and individualizing the program in terms of competencies, not time and courses taken.

The program designers have established many behavioral objectives. As

discussed earlier in this section, no goals for teaching have been established, so that the behavioral objectives cannot be placed within a context of competent teaching.

It appears to us that CDMS has not individualized the program in terms of competencies or in providing alternate routes of achieving those competencies. All interns in the program must achieve the same objectives (reading concentration majors must achieve still additional objectives). While the modules do contain an opportunity for pre-assessment, we wonder if this option is taken full advantage of by the interns. Since we do not have any data upon which to draw conclusions about this question, we suggest that consistent use of this option would allow additional individualization. No attempt has been made to individualize the required competencies for specific interns. See Chapter 2 for further discussion on the issue of individualizing competencies.

It seems tc us that teacher preparation could be strengthened by writing the modules so that they provide alternative methods for achieving the competency. The data shows that less than half of the interns and teachers feel the modules allow for the intern's individual working and learning style (see Table 51). Individualizing the program by providing alternatives in the modules would help to take account of individual learning styles and would help the interns acquire individual teaching styles.

Objective 8--Expand kinds of experiences--visitation, observation, participation and student teaching, working in all professional and non-professional areas with differentiated staffing in action: paraprofessionals, counselors, supervisors, administrators, researchers, curriculum developers, teachers.

CDMS has expanded the length of field experience and in a few areas has also

expanded the kinds of experiences for the intern. More professionals are involved in CDMS than would normally be involved in a regular teacher education program. Additional classroom teachers without interns assigned--floating teachers--and field specialists, e.g., reading, art, and music teachers, have become a part of the program and therefore share in the education and evaluation of the interns.

It is surprising that less than half of the participants think that a first semester intern should be assigned a second semester intern for the purpose of peer learning (see Table 61). This, we think, would be beneficial for all the field-based participants. This would facilitate a system of differentiated staffing where the co-operating teacher's role would be changed to allow a greater opportunity for working directly with the interns. The teacher could become more of a manager of instruction with the first and second semester interns working under her supervision. In addition, the elementary pupils would benefit from more adults in the classroom giving them more individual attention.

Objective 9--Provide earlier initiation to teaching and the opportunity for earlier vocational decision-making.

A field experience that begins in the junior year is certainly more advantageous for the intern than waiting until the second semester of the senior year. Opportunities to observe, to tutor individuals and small groups, and to experience a school setting might be helpful if they were to occur before the junior year, thereby providing an earlier opportunity to make vocational decisions.

Objective 10--Extend practical, in-school teacher education--providing more time, more experience, and spaced learning.

As indicated earlier, CDMS has extended the practical, in-school part of the teacher education program. As stated before, (see discussion of objective 4) this

can only be meaningful if the field experience is more carefully structured.

Objective 11--Plan overall evaluation (including follow-up) of the effectiveness of its new teacher education program and its component elements.

As previously discussed, this is one of the weakest areas in the program. More effort must be spent in both formative and summative evaluation. This issue is further discussed in the recommendations section.

While this evaluation should help the CDMS program to get a better understanding of how program implementation is progressing, contracted evaluations by outside agencies are not sufficient to fulfill objective eleven. It is important that the program develop a research component and start to develop its own data base. A program in its formative stages must constantly be under scrutiny of its implementers. In essence, the policy board must place greater emphasis on evaluation and they must insure that data is available from which policy decisions about the operation of the program can be made.

Communications (24-29)

The message resulting from the data on communication in the CDMS program is that there is relatively good communication at the top of the program hierarchy, and relatively poor communication at the bottom (or at the peripheries). As evidence of this, Table 27 shows that most of the participants think that the lines of communication are well-defined, but in the same table we see that a majority of both teachers and interns disagree with this. In Table 28, there is indication that a majority of the respondents think that the lines of communication are easily accessible, but that, on inspection of the subgroups, close to half of the interns and teachers disagree on accessibility. From those findings, it makes sense that almost twice as many teachers and interns as college personnel and administrators

rarely use the lines of communication (Table 29). We do not know, however, whether to infer that the teachers and interns do not use the communication lines because they are inaccessible, or that they think the lines are inaccessible because they do not use them.

The data regarding these two groups (interns and teachers), however, does seem logical when considering they probably have the least time to do any communicating, and are also the farthest removed from the central administration of the program. An explanation of this phenomenon, whether it be real or merely a psychological block, is not necessary in order to know that it probably does cause some communications problems, the implications of which are not evident from the data gathered.

Information dissemination, somewhat different from communication, is perceived by a majority to be carried out systematically (Table 24). Over half the interns, however, disagree that it is systematic. This is probably the group which receives the most information, particularly regarding their work, and they probably receive the information in numerous ways (memos, meetings, etc.) and perhaps even receive information about decisions which are still in the formulation stages. We do not know what the effects of this are on the interns, but we suspect that feelings between them and the administrators would improve if there were a regular method, time, etc. for transmitting program information to them.

It speaks well for the program that it is clear to most who can help them with problems regarding the program (Table 26). No evidence was gathered, however, on the effectiveness of this help. Table 26A gives information about the numbers turning to particular groups for help. We see again the burden placed on cooperating teachers; the interns turn to them primarily for program-related problems,

and only secondarily to the field supervisors. The field supervisors and principals carry much of the problem-solving responsibility for the co-operating teachers. Perhaps more participants should be relying on the program director for certain types of problem-solutions.

Role Definition (30-36)

The CDMS program is trying not only to institute a new philosophy of teacher education, but also to re-define roles for everyone involved in this process. This is most tangibly seen in the new titles which have been given to the student teachers, who are now called "interns" in order to distinguish them from regular student teachers, whose behavior and knowledge on entering the classroom experience is different from that of the "interns." New titles, however, do not necessarily communicate all that is necessary, nor do they mean that the role will actually turn out to be a new one, or that others will relate to people in that role in a new way.

The role functions in CDMS seem to be appropriately just as much in evolution as the program ideas and implementation. There are some pitfalls in this process, however, and we think the role functions should be continually examined in a methodical way in order to determine (1) how the current role functions are being defined, (2) how participants are fulfilling the current role definitions, and (3) whether the role functions remain appropriate within the context of other job/school functions.

Information collected from the evaluation questionnaire bears on all three of these questions about role functions. If we compare the findings of Tables 33 and 34, we can get an idea of the extent to which the perceived activity priorities coincide with the activities that are actually given priority. We find that interns spend most of their time planning and preparing lessons (Table 33), whereas the highest priority is seen to be teaching on a formal basis (Table 34), in which the interns spend

only the third greatest amount of time (see Table 33 again). What the teachers do in CDMS activities seems to be more related than what the interns do to their perceived priorities. They spend most of their time observing the interns, then planning and preparing lessons, and thirdly evaluating modules. The highest perceived priority for them is observation, while the next is evaluating modules; the only discrepancy here is that they might be spending more time in planning and preparation than what the program has defined as important. The analysis for Table 33 did not distinguish between college professors who were teachers as opposed to field supervisors, so a comparison of this information to that in Table 34 does not appear to be particularly meaningful.

Table 35-36 gives some similar information regarding actual role responsibilities compared with "ideal" role responsibilities. On inspection of the percentages, we find strong agreement between actual and ideal role functions; this must be cautiously interpreted, however, in the sense that the job function as it exists may influence the perception of what it should be ideally. In other words, even though a large percentage of participants think a certain group should have a major responsibility for a particular activity, that does not mean that we should not question whether the role definition is appropriate. An example might be "Facilitating program communication"; there was high agreement that the program director should have the major responsibility for this activity, when in fact, perhaps this responsibility should lie equally with the director and the field supervisors.

The major discrepancy within this table lies under the item of "Helping to solve the interns' problems." The co-operating teachers are seen to have a majority of the responsibility for this now, but under the "should have" column they rank third. This relates to the overall problem of how much responsibility the co-

operating teachers now have. As mentioned in the previous chapter, from this Table 35-36, we see that the teachers have major responsibility for 7 of the 18 activities, a large number considering that there are four other major groups/ individuals who could be taking the responsibility. This seems to be clear evidence that the teachers are being asked to carry out a number of duties which could be given to other people, who may even be more appropriate for some of the functions.

These numerous responsibilities of the co-operating teachers in the CDMS program cause role conflicts which we see as central and crucial to the program's effectiveness. Two roles are absolutely essential to the program's definition and existence: the interns and the co-operating teachers. Unlike any other groups in the program, these two are the sine qua non of the program. Having accepted that assumption, the focus and objectives of these two groups must be considered primary. Let us look at what the objectives are, both theoretically and in actuality from the data gathered in the interviews and questionnaire.

Theoretically, the teachers' primary concern is for their pupils; this concern is, in actuality, where most of their time and effort is spent. Teaching their pupils is their job by definition; this is what they are paid to do. They are not paid to teach interns, nor are they given an appropriate amount of time free from regular teaching duties to do this, nor does society or their job institution typically define their role to include this duty.

In contrast, the interns' main interest should lie theoretically in learning the approaches and methodologies which are relevant to teaching pupils, who will ultimately become, but are not currently, their major focus. Their current interest, and justifiably so, is preparation for a future job role. What it often translates into in practice in the CDMS program, it appears, is (a) the interns' almost

overwhelming concern about the completion of modules and (b) what we sensed to be a forgetfulness on everyone's part that any CBTE program is part of a larger educational system, that it does not exist--at least theoretically--for itself or for the State Education Department, but for the better education of teachers, who will hopefully bring about better education for the pupils.

The concern for the interns' education is certainly justifiable; the CDMS program exists for that purpose. Their education, however, requires in-service preparation under the guidance of experienced teachers, whose role is not functionally defined with a primary purpose of teaching the intern. The inter-role conflict for the teachers between these two teaching roles becomes apparent. Citing the evidence from the questionnaire that almost everyone perceives the school district as taking more responsibility and time in the CDMS program than in other teacher education programs (Table 22), it surely must follow that the demands on the teachers' effort and time increase in the program as well.

It is important to recognize this conflict and to emphasize it, because the implications are several and, in our opinion, crucial to the program's effectiveness. Perhaps Figure 5, in terms of the major focus, will underline the differences in role orientation. The CDMS program can be simplistically pictured in Figure 5:

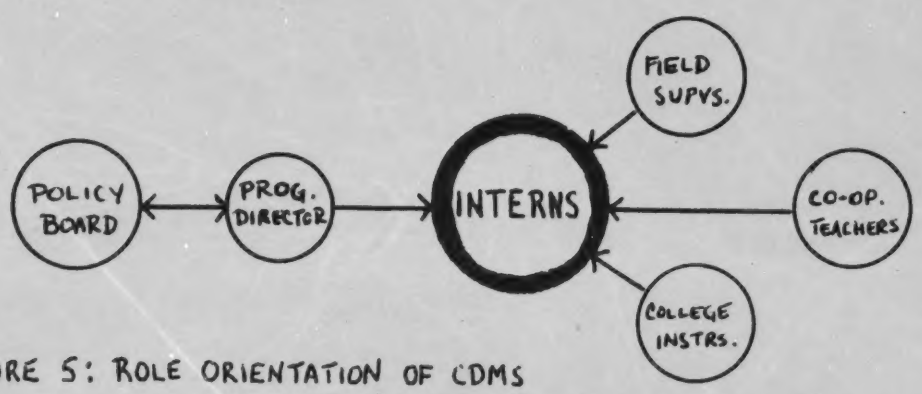


FIGURE 5: ROLE ORIENTATION OF CDMS PARTICIPANTS IN RELATIONSHIP TO THE PROGRAM'S MAJOR FOCUS

All those groups peripheral to the interns have major input into the interns' education; this is a large concern, according to the definition of job responsibilities, for all the groups except the teachers. This program is of minor concern within their job framework, which would place their pupils, and not the college students, in the center circle. And, in fact, the questionnaire data bear out this conflict; over 70% of the teachers perceive a conflict between their job-related priorities and the demands of the program (Table 19).

What implications accrue from this basic role conflict for the program? It may already have resulted in some of the following:

(1) Difficulties in getting teachers to participate in the program, since unrealistic demands are made on their time and energy. Already 25% are participating as a favor to someone else, and over 60% will not continue in the program without remuneration.

(2) Hostilities of teachers toward the program because their primary job objectives are not sufficiently recognized by the program orientation. These hostilities may be translated into poor teacher-intern relationships, or again, future non-participation.

(3) Wasted time resolving trivial problems arising from this conflict. There seem to be many problems over the evolving roles of the teachers and interns. Although these roles may be slow in being defined, the problems resulting from unfulfilled demands from both groups may diminish if they are helped to understand that the two groups have quite different major priorities.

(4) Anxiety and/or hostility from the interns toward the program because the teachers are not totally oriented toward helping them complete the modules. Also, the interns are asked to do activities other than module completion in the classroom.

may be an important factor in working out the problems which inevitably arise in a developing program.

The most crucial attitudinal problems within the program, in our opinion, are related to the teachers in the school systems. In Table 38-39, we note that on entering the program, about 40% of the teachers had a neutral or negative motivation for volunteering to participate (Table 10); approximately a third believe in the program concepts, a quarter "volunteered" as a favor to someone else, and the majority participated because they like to become involved in new and experimental programs.

We predict the possibility that in the relatively near future, some sort of informal cost/benefit analysis will be in process for each teacher participating, as indeed, some appear already to have occurred as detected from the interviews and teacher "dropouts." The costs to the teachers are great in terms of time and effort; most of the teachers agreed that CDMS requires more time than did prior methods of teacher education (Table 32).

At least two alternatives exist if the program is to retain its teacher participation, especially if the individuals within the public school systems learn that other competency-based programs exist in which they can participate under the mandatory law and which provide more benefits with relatively fewer costs:

(1) Reduce the costs. The basic thrust of this is discussed in the section on role definition. Mainly it involves reducing what appears to be an overly burdensome load of teaching the interns that which they could learn elsewhere, and freeing them for guidance, needs assessment, and evaluation of interns. It might also involve defining the teachers' roles with more clarity and less overall responsibility for the interns' learning.

(2) Increase the benefits. Self-gratification, novelty, and altruism will carry the CDMS teachers only so far. At this point, a majority think that additional remuneration is necessary for their continuing in the program. When and if another way is found to satisfy these needs, or when the costs for their satisfaction becomes too great, there exists a high possibility that a dearth of volunteer teachers will become a reality.

Modules (45-54, 57, 60, 62)

Modularized instruction is perceived within the literature on CBTE to be one of the elements, but not a crucial or definitional characteristic of a competency-based program (e.g. Arends, 1972). Houston and Howsam (1972) placed the modules within an appropriate context when they point out that "modularization and competency-based instruction are not the same thing." (See Chapter 2 of this report for a discussion of this.) The key point is that the modules are part of a more comprehensive instructional system which has as its focus performance-based competencies.

The emphasis, then, if CDMS is to be congruent with other CBTE programs, should be on the broader competency orientation rather than on just the modularization of instruction.

The program participants as a group seemed to understand the lesser importance of modularized instruction, and also that it had greater emphasis in this program than it would have in "ideal" CBTE programs. Table 20-21A shows that modularized instruction (item 8) was ranked by the group as 11th in importance in any CBTE program, but that the CDMS program placed it 3rd. Also only 14% saw modularized instruction to be very essential to CBTE (Table 48), while over 40% saw it to be only somewhat essential.

The effects of the module over-emphasis show up to a certain extent in the questionnaire results. Table 50 shows that the teachers and interns are in almost total agreement that there is a conflict between the module work and commitment to classroom teaching. From the information obtained in Table 49, we think that perhaps there was a mis-interpretation of the question to mean that the module completion should be more important than the other classroom work, so we think that perhaps the percentages do not give valid information. Table 51 reveals that a majority of those most involved with the module work--the teachers and the interns--do not think the modules allow for individual working and learning styles, which is a key reason for modularization. In Table 52, we see how much of the interns' time is taken up by completing the modules; almost a third spend over 15 hours, and more than a third spend 8-15 hours. When so many of the modules are reading and writing activities, this amount of time spent on them, when the program is supposed to be a field-based activity experience, seems excessive. Almost all the teachers, interns, and administrators, and a large percentage of college personnel, think that the methods courses/modules should be taught before the field experience even begins (Table 55). The most important finding is that three-fourths of the respondents do not think that completion of the modules--which are supposed to be competency based--indicates that the intern will be a competent teacher (Table 60). If there is not general satisfaction that someone who possesses the module competencies will become a competent teacher, then it is apparent that the competencies must be re-formulated.

It also seems that the current modules, because of their elaborateness, redundancy, and profuseness, may cause at least the interns, if not many other program participants, to lose sight of not only the competency-based focus, but also

the purpose of internships, which is not module completion, but experiential learning.

We understand that the modules are now undergoing revision--something that almost everyone in the program thinks is necessary (Table 45). In addition to this, we think there should be an entire revision of the approach toward the modules. They are tools to the end of a competent teacher, not ends in themselves; a CBTE program is more than modularized instruction.

The Modules in Particular

We have inspected the current module objectives and instructional activities, and draw the following conclusions on the basis of this inspection.

We did not look for the kinds of problems which were covered in the first part of the analysis of the modules conducted by Dr. Bukowski (see appendix). This appears to be quite a detailed and thorough analysis, and we generally agree with the conclusions on p. 3, in Section D. We want to add some comments, as well as re-emphasize some points.

The major weakness we see is that, although the format of the modules, module clusters, etc. seems quite well done and efficient, the substance following the format labels often fails to coincide with the competency-based concepts. It appears to be, in many cases, merely a re-packaging of the methods and criteria of the usual teacher education courses. In many modules, there is not even a progression to formalized mastery learning. This problem is probably one of the most difficult in the formulation and evolution of the CB concept and its implementation.

In order to take a closer look at this problem, we shall document a few of the cases:

(1) Under the pre-assessment and post-assessment categories, the criteria are not stated clearly enough to make objective assessment possible; the assess-

ment is not criterion-referenced. Some examples: a) 80-90% mastery is often quoted as the criterion; however, the instrument/scale is not specified, e.g., "The instructor's own criterion for mastery may be set, although at least 80% mastery should be met." b) The assessment techniques are often unspecific and highly subjective: "The college instructor and/or supervisor will judge competency" (AV 001.03) or "Either through conference with the instructor or via paper and pencil test, the intern will meet the objective stated above." c) In some cases, under the label of post-assessment, it actually does not exist, e.g., "Interns will teach lessons using AV materials under the supervision of the supervisor and/or master teacher." (AV 001.02.)

In all these cases, the assessment is lacking the key characteristic outlined by most definitions of the CB concept. The criteria and level of performance for evaluation are not specified and made public; they seem to rest primarily on the subjective measures used in regular teacher education courses. The majority of the program participants agree that this is true, especially the teachers (Table 62).

(2) The instructional activities are many times not specific (e.g." attendance at class lecture," "selected readings," "in-class discussion of specifics"), and just as important, there are rarely alternative instructional activities for the same objective.

(3) The objectives omit in some crucial areas any experience regarding actual teaching performance. For example, the Educational Psychology module is oriented toward learning theory, definitions, and concepts, but not the skills in this area, e.g. PL 001.05; merely because the intern can state the conditions in the learning situation, it does not follow that the intern has the ability to recognize or create these conditions in actuality. The most serious violation of this crucial

performance aspect of the CB concept is in the math modules, each of which contains the option: "Intern may waive the objective if knowledge of the content area is displayed to the sponsor teacher." Surely we need not even resort to academic research to see the fallacy in this; each of us has had a teacher who knows the content but could not effectively teach it. And to complete the math component essentially requires nothing but content knowledge.

(4) The recycle. This is also often unspecific, e.g. "Conference with the instructor, resulting in activity...appropriate to remedying specific areas of weakness." This could perhaps be considered the least crucial of the activity sequence; however, the weaknesses are apparent. In this particular "recycle," which appears in numerous modules, one wonders how the college instructor, who rarely assesses the interns' actual teaching performance, can help in remedying teaching skill weaknesses. Assessment for re-learning needs seems to be a more complicated task than indicated here.

Participants' Perceptions of Particular Module Revision

The program participants generally agreed on a number of aspects regarding module revision. Only a small percentage (6.8%) thought no changes should be made; see Table 45 for the percentage indicating the types of module changes selected. The most important revisions were thought to be the elimination of some modules, and the improvement of their quality. Also, almost all participants thought that some modules should be completed before the intern enters the field experience (Table 46). More than half thought that the modules ought to include routine classroom procedures; the only group with more disagreement than agreement on this question was the college personnel group (Table 57). This seems to be a significant, though predictable finding, since they are the ones farthest re-

moved from the actual classroom situation (excluding the citizens) and consequently may not be fully aware of the importance and time-consuming nature of these procedures. Related to module revision is the perception by almost three-fourths of the teachers that the interns were not prepared to conduct themselves professionally (Table 58); perhaps this behavior should be investigated and included in a component.

Summary of Major Strengths and Weaknesses of the Program

By direct implication from the data, there are three major weaknesses in the CDMS program revolving around preparation for the program, revision of the modules, and role of the school teacher.

Perhaps it is too early, with the program still in rapidly changing stages, to expect methodical and thorough preparation and orientation for all participants; however. respondents indicated more was needed, and this need has to be spoken to and should be on the priority list for revision. Dealing with this could perhaps relate to the solution of other problems as well, e.g. a clear understanding of roles and role expectations, which would produce more positive attitudes.

The modules are currently under revision; we are sure that they will need more work, because (1) formative research needs to be done regarding their effectiveness, and (2) they need to be related to a concept of competent teacher, which has not been clearly defined by the program. Module revision should be a high priority, because modules are the instructional system which determines whether the product--a competent teacher--is produced.

The third major change has to do with the role of the co-operating teacher; we think there is enough evidence in the data on teacher dissatisfaction with their overburdened role that they need immediate attention if their participation is to be

assured.

By indirect inference of the evaluation data and by comparing our knowledge of the CDMS program with our theoretical knowledge, we detect two other problems which we consider major. Number one concerns the role of the college professors; more information is needed on what their current role is. However, we do know that the majority spend under 5 hours a week on program-related activities, and that most of that time (excluding the field supervisors) is spent on the college campuses. H. L. Jones states that "Teacher educators--in addition to making arrangements for student involvement and for inservice teacher education--also must be integrally involved in field-centered programs, as field or clinic professors or specialists, working in schools as arrangers, demonstrators, prescribers, evaluators, and diagnosticians. These tasks are so important that they cannot be relegated to graduate students or to teacher-education personnel who will regard the tasks as a demotion" (1972, p. 116). The questions that arise for the CDMS program are (1) what is the program's role definition for college teacher educators, and (2) are they fulfilling those role expectations?

More basic than this, indicated by the lengthy analysis in this chapter, is the writing and revision of the goals and objectives for both the program and for competent teaching. We think CDMS program revision should begin with this.

We turn now to the major strengths of the CDMS program. There are some elements which we consider basic to any program's success; the CDMS program appears to be strong in these. First and most importantly there is enthusiasm for the program. Data from the evaluation questionnaire indicate this: attitudes toward the program appear to have grown more positive, most participants say they will continue in the program, most feel committed to it and would "do it again," and

there are many who believe in the basic concepts of the program. The pre-questionnaire interviews bore out these findings at all levels, except perhaps with the interns, who have little to compare this program to; even a drop-out co-operating teacher was positive in comments about the program's potential. We think that efforts should be made to keep enthusiasm high, but not taken advantage of, particularly by asking too much of volunteer activities, personnel and time. For example, one way of maintaining high enthusiasm would be research findings indicating that the program is successfully producing competent teachers.

From the questionnaire data, it appears that communication lines are fairly well-defined and that information is reasonably systematically received. The reasons for this strength ought to be investigated, since it may just be that the program is rather small and the director relatively accessible to all participants, rather than because of any particularly systematic communication methods. Perhaps that condition is all that is necessary, but if there is a good formal system, it should be noted and efforts made to maintain it. (It should also be a concern that some do feel isolated from the program; this, to a certain extent, is related to the communication network, and could indicate areas needing strengthening.)

The teachers and interns seem to have maintained perspective on their primary focus--the classroom--despite the abundance of knowledge modules and the often-changing nature of a developing program. Evidence for this strength came from the data that the interns and teachers were more committed to the classroom program than to module completion, and from the interviews, where these two groups expressed some anxiety without being completely overwhelmed.

Another strong point can be seen from the data in Table 35-36; those people who are defined as having particular functions actually are carrying out those

responsibilities. This was also our impression from the interviews; participants did appear to be doing their jobs as defined by the program.

We are not aware of how a final major advantage of the program occurred, but in some way a majority of the participants have a good grasp of the conceptual elements and objectives of competency-based education. We think it is necessary to find out how this came about, so that whatever happened can continue; knowledge of the underlying justification for a program's existence helps to keep its functions, job roles, and problems in perspective for the people participating, and should be especially helpful in fostering tolerance while the program is still developing.

Chapter 6

RECOMMENDATIONS

The recommendations for revision of the CDMS teacher education program which are made in this chapter are based on the needs of the program which were drawn from the data on the program at its status as of spring, 1974. They should not be considered complete; on the other hand, we think we have made some suggestions which may be necessary for the program's success as a CB program. Our primary intent, however, even with the revisions we consider most crucial, is to raise questions; we think it almost equally important to justify with good reason a refusal of a recommendation as to implement that recommendation.

The suggested revisions are of two kinds: (1) a list of five which we think are crucial to implement, and which are prioritized by importance and timing, and (2) a list of unprioritized recommendations, which would certainly enhance the program's effectiveness, but which could be postponed or ignored without a lot of damage to the program's effectiveness as a competency-based project.

Primary Recommendations

(1) The most essential revision that needs to be made is to write the goals and objectives for the program and for competent teaching, and defining the competent teacher is key. We think this should be the task of the Policy Board, since there should be input from all levels of the project. There must be a consensus on what competent teaching is; it is not necessary to have research proving the relationships between the knowledge, skills, behaviors, attitudes, etc., that such a teacher must have (since there actually exists little of such conclusive findings) and whether or not those factors actually do produce learning in pupils; they can and almost have to be considered assumptions. But a "competent teacher" must be defined, and clearly, because that concept will influence most other aspects of

program objectives, delivery systems, role definitions, personnel relationships, and module objectives, among other things.

This definition can be arrived at by a number of ways, among them (1) drawing on personal experiences of teaching and observing other teachers, (2) focusing on a formal task analysis of teacher role, (3) keeping in mind the needs of the elementary school pupil, (4) reading about what others think is a competent teacher.

We cannot emphasize enough how necessary we believe this revision is. The primary goal of the program is to produce competent teachers, and how that is done is very much influenced by what the participants and decision-makers and program designers and module writers think a competent teacher is. We suggest that the program has lacked a cohesive and consistent substance, delivery system, and orientation because of this failure to define competence. And it is clear that competence has not been defined, since most of the respondents think that program completion does not produce competence.

The definition of competence will directly influence (1) the number and nature of the program objectives, (2) the substance of the components, (3) the length of the components, (4) whether to include a particular component at all, (5) the number and nature of knowledge objectives, (6) the number and nature of performance objectives, (7) whether to include attitudinal modules (which are not currently included), (8) whether to include experiential modules, (9) whether to include consequence objectives/modules.

(2) The second revision that needs to occur is re-writing the modules. The main problem here is that emphasis has been placed on modularization, rather than on appropriate modularization. It is here that we can begin to see the impact of the definition of competent teacher. Some modules must be eliminated; how are

these selected except by some previously decided upon criteria of competency? Some must be added; again, the same problem of selection exists. All the modules should in some way be related to the goals of competent teaching.

A major influence on re-writing, changing, eliminating, adding modules is amount of time for completion of the modules; theoretically, module completion for competency could go on for years, depending on how the group views competency. A reasonable amount of time for completion is also a necessary definition.

Another change is that modules should be differentiated as to whether their objectives are knowledge, performance, consequence or experiential objectives. This will be a primary variable in determining when the module is to be completed--before or during the field experience.

The criteria for assessment of each competency badly need revision in terms of their specificity of mastery levels under particular and explicit conditions. This also means that the module objectives must be specific enough to facilitate objective evaluation. For example, "To state a clear, comprehensive definition of learning," is not a specific objective which allows for evaluation of such definition in agreed-upon competency terms; one person's evaluation might be quite different from another's, and any standard of competency thus is lost.

Overall the modules need to be particularly evaluated in terms of (a) the relationships of the components to each other, and (b) the objectives and activities within each component. For example, how probable is it that a teacher will be in a school with no music teacher? We would guess that it is fairly low, and therefore the necessity of completing the rather extensive and detailed music module seems unnecessary, particularly activities such as "Outline each topic (listening to music, moving with music, etc.) in detail from book," or "Outline broadly from several

books," with the post-assessment consisting of giving the instructor the outline. (Above all, with elementary children, music is a doing activity, not a reading activity; we should assume that the interns have the ability to read and to outline such subjects. We cannot however, assume they can perform these skills in the teaching arena. Requiring a reading knowledge of this subject is wasting effort; teachers will not need it in schools with music teachers, and in the rare school without one, a list of references and major concepts given to the interns should suffice for their personally-initiated learning.) We do not choose the music module in particular to criticize; we are using it solely to make the point that time is of the essence. The time the interns should spend on each different module needs to be put into perspective, with some modules being weighted as more important; the time within each module should also be placed in perspective, with busy work and less important objectives being eliminated, and the essence of the subject being culled from the instructional activities as efficiently as possible.

One other important point for re-emphasis, particularly in regard to the memo on Program Improvement Activities of April 10, 1974 (see appendix). The program improvement, as discussed here, appears to be focused only on the module revision. We cannot emphasize strongly enough that the program is <u>not</u> the modules; the modules are only a part of the program, and as such, should be revised in an appropriate manner, with sufficient attention being given to the other program components. Critical attention must be paid to the program as a whole, when revisions are being made in any part of it. The failure to do so, as Cooper and Weber (1973, p. 10) point out, may result in wasteful overlap and disharmony among supposedly complementary components, and at best, the outcome is that innovations will not significantly change the total program in the desired direction.

An advantageous by-product of appropriate module re-writing is that some of the responsibility that the co-operating teacher has will then be reduced, because they now must interpret criteria for competency in addition to just evaluating module completion. It should also free the college personnel for management, guidance, and individual needs assessment.

(3) The definition and functions of the role of the co-operating teachers must be specified (although not necessarily rigidly defined), and in our opinion, changed from the current status. This group is vital to the field-centered orientation of the program; they are necessary, if for no other reason than to serve as role models for the interns, and this function may perhaps even be their most important. Their participation, if not their enthusiasm, must be obtained, and the data indicate that CDMS is in danger of losing both.

Basically this change should consist of lessening the burdens of both time and responsibilities now placed on these teachers, as well as increasing the rewards for their co-operation. Money or time freed from teaching (though we think the second might not be advantageous for the elementary pupils) might satisfy the latter revision. Reducing the burden might take the following forms:

a) There are some tasks that could be done more efficiently by other people, at other times. Appropriate module revision would assure, for example, that the intern could write a competent lesson plan or behavioral objective before he entered the field experience. Table 35-36 offers information for changes in role responsibilities; for example, item 5, "Teaching interns about teaching" is cited in both columns as the major responsibility of the co-operating teachers. We contend that this should not be their responsibility at all; they should be demonstrating, showing, evaluating, guiding--but the teaching of the interns should be done through the mod-

ules and the college instructors. Another item, "Determining the needs of the interns, is also given to the teachers as a major responsibility; this is a highly complex and time-consuming activity, or at least it should be if done properly, and it would more appropriately and efficiently be done by someone who knows the intern as an individual, and who would remain with that individual throughout the field experience, and would have been with him/her previous to the internship, even to determining the readiness of the student for internship. (Currently readiness for the field experience is assumed; we think this is a big assumption.) Another major responsibility given to the teachers is "Helping solve the interns' problems" and even the program participants think they should not have that responsibility.

b) It naturally follows from the above discussion that we think the colleges should provide more field-based instructors to take over such tasks as needs assessment and evaluation of teaching abilities. This will be discussed more fully in the next recommendation.

c) Teacher-intern and teacher-professor relationships. These are not well-defined, and consequently the lack of clarity may be a source of problems, when the relationships could be a source of rewards of positive feelings. It should be clear to the interns that they are not without accountability to the teachers, who are truly the field experts and a source of a multitude of small techniques which add up to a large store of teaching knowledge; this concept of the co-operating teacher should be purposefully fostered. In the process of doing this, there could perhaps be more communication and co-operation between the college professors and the teachers; we have gotten the impression that essentially no relationship exists between these two groups, and fostering one could bring a number of beneficial results.

(4) The role of the college professor in a teacher education program needs to

change, particularly the one currently held by those in CDMS. We qualify all our discussion of role definition changes by the following statement from Wiersma and Dickson (1973):

> To focus development on the creation of new roles is merely to create a new role for a new structure, both of which could be expected to reach obsolescence at a very early date. The need is for a better understanding of all that is involved in evolving or changing faculty roles. This task is difficult in the schools and nearly impossible in the colleges and universities where academic freedom is highly valued and substantially maintained. If college or university faculties are to become committed to a teacher education that reflects the values and needs of a changing society, we must find ways of providing teacher education in contexts that are themselves constantly changing. (p. 113)

If the context is constantly changing (and we make that assumption), then it becomes necessary to keep tabs on those rapidly changing values and needs, and we think this necessitates a more field-based focus for all the college professors involved in the program. More than this, they should take the responsibility for the interns' whole teacher education, managing and overseeing all the types of modules (knowledge-based, performance-based, and perhaps after the program has become more established, moving into some consequence-based modules). One criticism of competency-based teacher education by those who either do not understand the concepts, or who have not observed them properly implemented, is that such programs are depersonalizing; a solution to this would be the continuity provided by each program professor having under sponsorship several interns throughout their participation in the program. This would provide also a continuing relationship on a one-to-one basis throughout the interns' knowledge-based module completion, as well as the two field experiences. (See Schalock and Garrison, 1973, for further discussion of this relationship.)

(5) The participants need to be better prepared for involvement in the program. This would eliminate a lot of confusion and false expectations about role functions and program goals, among other things. We agree with the respondents that a handbook is necessary. Also we recommend that a meeting/workshop/social hour be held at the beginning of each new set of interns; we think everyone should attend these meetings, at least until the program becomes stabilized in terms of format, but even after that, required attendance would insure that participants knew each other at least by sight, and for the "repeaters" it would tend to lend program cohesiveness, and serve as an opportunity to increase communication and establish longer-lasting relationships, previously discussed as important for a number of reasons.

Secondary Recommendations

(1) Communication could be improved by regular meetings with other CDMS personnel. A majority said that this would be helpful; whether or not they would attend such meetings is another question. The need for them appears clear, however.

(2) An attempt should be made to foster as many "co-operating activities" as possible, since co-operation appears to be necessary in such a program involving more than the usual two institutions. Regular meetings, orientation workshops, and Policy Board meetings all are a part of such a thrust. On a more informal basis, casual meetings, phone calls, impromptu discussions, etc. should be encouraged.

(3) Scheduling might be made more flexible in order to de-emphasize course completion and emphasize competence based on appropriate module completion. The semester system, around which everything is based in the CDMS program,

lends itself to the impression that one is completing a course on the usual time schedule.

(4) Informal opportunities for teaching/tutoring before entering the program might contribute to more realistic vocational-decision-making. This might even be required, especially in light of the increasing difficulties in obtaining a teaching position (which we also think the interns should be made aware of).

(5) There should exist a systematic way to communicate program format and technical changes; perhaps even a regular in-house bi-weekly or monthly newssheet could be distributed, with such changes included with other program-related news. This would also aid in decreasing the isolation felt by some participants, and in increasing group cohesiveness.

(6) Information should be gathered on the following specific issues which were not covered in the evaluation questionnaire:

-- How well do the Policy Board members communicate to and from their constituencies?

-- More clarity about what the faculty roles are now.

-- Committee activities, roles, influence on policy and program changes.

-- Determination of exactly what the communication system is and how it works.

-- Does the program tend to "de-personalize"? If so, how and why? And who thinks so?

-- Determination of the participants' perceptions of the program objectives.

(7) A permanent evaluation system/research component should be established.

A beginning might be made by revision of the current evaluation questionnaire, distributing it every year for comparative data and for continuing feedback for program revision. More ambitiously, if money could be obtained, attempts might be made to begin to show the validity of the relationship between module completion and achievement of the competencies.

Summary of recommendations

Primary Recommendations

1) Write goals and objectives for competent teaching.

2) Revision of modules, particularly in light of Recommendation #1.

3) Re-define and change the role of the co-operating teacher.

4) Re-define and change the role of the college professor.

5) Better prepare participants for involvement in the program.

Secondary Recommendations

1) Regular meetings with CDMS personnel.

2) Foster co-operating activities, on both a formal and informal level.

3) More flexible scheduling.

4) Providing/requiring informal opportunities to teach for interns before entrance to program.

5) Systematic information communication system established.

6) Revision of the evaluation questionnaire.

7) Establishment of an evaluation/research component.

REFERENCES

Andrews, T. E. Editorial. Performance-Based Teacher Education, 1973, 1 (6), 6.

Andrews, T. E. What We Know and What We Don't Know. In W. R. Houston (Ed.), Exploring Competency Based Education. Berkeley, California: McCutchan Publishing, 1974.

Arends, R. L. A Brief Summary of Competency-Based Teacher Education. Unpublished manuscript, State University College at Buffalo, 1972.

Arends, R., Elmes, R., & Masla, J. Controversial Issues Concerning Competency Based Teacher Education. Performance-Based Teacher Education, 1972, 1 (3), 5-6.

Burke, B. Curriculum Design. In W. R. Houston and R. B. Howsam (Eds.), Competency-Based Teacher Education: Progress, Problems, and Prospects. Chicago: Science Research Associates, 1972.

Clark, C. M., & Gage, N. L. Filling in the Gaps in Competency Based Teacher Training. Paper presented at the annual meeting of the American Educational Research Association, Chicago, April 1974.

Cooper, J. M. & Weber, W. A. A Competency Based Systems Approach to Teacher Education. In D. W. Anderson, J. M. Cooper, M. V. DeVault, G. E. Dickson, C.E. Johnson and W. A. Weber (Eds.), Competency-Based Teacher Education. Berkeley, California: McCutchan Publishing, 1973.

Cooper, J. M., Weber, W.A. & Johnson, C. E. A Systems Approach to Program Design. In D. W. Anderson, J. M. Cooper, M. V. DeVault, G. E. Dickson, C. E. Johnson, and W. A. Weber (Eds.), Competency-Based Teacher Education. Berkeley, California: McCutchan Publishing, 1973.

Dodl, N. R. Program Evaluation and Student Assessment. In D. W. Anderson, J. M. Cooper, M.V. DeVault, G. E. Dickson, C. E. Johnson, and W. A. Weber (Eds.), Competency-Based Teacher Education. Berkeley, California: McCutchan Publishing, 1973.

Dodl, N. R., et. al. The Florida Catalog of Teacher Competencies. Tallahassee, Florida: Florida State Department of Education, 1973.

Elam, S. Performance Based Teacher Education: What is the State of the Art? American Association of Colleges for Teacher Education, Performance-Based Teacher Education Series. Washington, D. C.: The Association, 1971.

Ether, J. A. Problems in Starting-up a CBTE Program. Performance-Based Teacher Education, 1973, 1 (8), 3-4.

Hefferman-Cabrera, P. The Potential for Humanistic Endeavor. In W. R. Houston (Ed.), Exploring Competency Based Education. Berkeley, California: McCutchan Publishing, 1974.

Houston, W. R. Designing Competency-Based Instructional Systems. Journal of Teacher Education, 1973, 24, 200-204.

Houston, W. R. (Ed.) Exploring Competency Based Education. Berkeley, California: McCutchan Publishing, 1974.

Houston, W. R. & Howsam, R. B. (Eds.) Competency-Based Teacher Education: Progress, Problems, and Prospects. Chicago: Science Research Associates, 1972.

Jackson, P. W. Life in Classrooms. New York: Holt, Rinehart and Winston, 1968.

Johnson, C. E. & Shearron, G. F. Specifying Assumptions, Goals and Objectives. In D. W. Anderson, J. M. Cooper, M. V. DeVault, G. E. Dickson, C. E. Johnson, and W. A. Weber (Eds.), Competency-Based Teacher Education. Berkeley, California: McCutchan Publishing, 1973.

Jones, H. L. Implementation of Programs. In W. R. Houston and R. B. Howsam (Eds.), Competency-Based Teacher Education: Progress, Problems, and Prospects. Chicago: Science Research Associates, 1972.

Joyce, B. Assessment in Teacher Education: Notes from the Competency Orientation. In W. R. Houston (Ed.), Exploring Competency Based Education. Berkeley, California: McCutchan Publishing, 1974.

Koehler, V. The California Beginning Teacher Evaluation Study. Performance-Based Teacher Education, 1974, 2 (9), 8-9.

Lawrence, G. & DeNovellis, R. Validation of Training Modules in a Competency-Based Program. Performance-Based Teacher Education, 1974, 2 (9), 9-11.

Lindsey, M. Performance-Based Teacher Education: Examination of a Slogan. Journal of Teacher Education, 1973, 24, 180-186.

Marsh, D. D. Impact of CBTE Assessed. Performance-Based Teacher Education, 1973, 1 (8), 2.

Massanari, K. CBTE's Potential for Improving Educational Personnel Development. Journal of Teacher Education, 1973, 24, 244-247.

McDonald, F. J. Evaluation of Teaching Behavior. In W. R. Houston and R. B. Howsam (Eds.) Competency-Based Teacher Education: Progress, Problems and Prospects. Chicago: Science Research Associates, 1972.

McDonald, F. J. The Rationale for Competency Based Programs. In W. R. Houston (Ed.) Exploring Competency-Based Education. Berkeley, California: McCutchan Publishing, 1974.

Popham, W. J. Minilessons as Criterion Variables for Evaluating Competency-Based Teacher Education Programs. Performance-Based Teacher Education, 1974, 3 (2), 5-6.

Potter, D. A. Teacher Behavior and Student Achievement. Performance-Based Teacher Education, 1974, 2 (9), 1-5.

Rosenshine, B. & Furst, N. Research on Teacher Performance Criteria. In B. Smith (Ed.), Research in Teacher Education: A Symposium. Englewood Cliffs, New Jersey: Prentice-Hall, 1971.

Schalock, H. D. and Garrison, J. The Personalization of Teacher Education Programs. In D. W. Anderson, J. M. Cooper, M. V. DeVault, G. E. Dickson, C. E. Johnson, and W. A. Weber (Eds.), Competency-Based Teacher Education. Berkeley, California: McCutchan Publishing, 1973.

Schmieder, A. A. Competency-Based Education: The State of the Scene. American Association of Colleges for Teacher Education, Performance Based Teacher Education Series. Washington, D. C.: The Association (jointly with ERIC Clearinghouse on Teacher Education), 1973.

Schmieder, A. A. The Last Relatively Complete Tentative Bibliography on Competency Based Education. In W. R. Houston (Ed.), Exploring Competency-Based Education. Berkeley, California: McCutchan Publishing, 1974.

Steffenson, J. P. Foreword. In D. W. Anderson, J. M. Cooper, M. V. DeVault, G. E. Dickson, C. E. Johnson, and W. A. Weber (Eds.) Competency-Based Teacher Education. Berkeley, California: McCutchan Publishing, 1973.

Steffenson, J. P. Foreword. In W. R. Houston, Exploring Competency-Based Education. Berkeley, California: McCutchan Publishing, 1974.

Wiersma, W. Jr. and Dickson, G. E. Changing Teacher Education Faculty Roles. In D. W. Anderson, J. M. Cooper, M. V. DeVault, G. E. Dickson, C. E. Johnson and W. A. Weber (Eds.), Competency-Based Teacher Education. Berkeley, California: McCutchan Publishing, 1973.

Appendix A

Proposal for CDMS Evaluation

Proposal for CDMS Evaluation

Proposed Evaluation of CDMS: A Field-Centered Competency-Based, Teacher-Education Program

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In recent years competency-based or performance-based education has received considerable attention from various sectors concerned with improving the quality of educational experiences provided for students of all ages. One of these sectors has been concerned with performance-based teacher education (PBTE), and several states, including New York, have moved in the direction of competency-based certification (CBC) of teachers. It should be realized that PBTE and CBC are not necessarily concerned with the same thing--a teacher need not necessarily go through a PBTE program in order to be evaluated for certification according to competency-based procedures and criteria. However, it makes a great deal of sense to integrate the two whenever possible.

During the Spring of 1971 the New York State Education Department, Division of Teacher Education and Certification, distributed a paper entitled A New Style of Certification which outlined the requirements for establishing experimental Trial Projects for the purpose of developing and evaluating one of several alternatives for establishing a competence-based system of certification in New York State. This paper outlined and discussed the following four requirements for the development and operation of each Trial Project:

1. Each Trial Project must be planned, developed, monitored, and evaluated by a policy board composed of representatives of the public schools, institutions of higher education, teachers, and teacher education students in a parity relationship regarding the power to influence decisions, and in the assumption of responsibility for implementation.

2. Each Trial Project must address and come to some resolution on the following questions:

   a) What are the stated objectives and priorities of the schools involved?

   b) What competencies should a teacher have to serve in those schools?

3. Each Trial Project must establish explicit criteria and procedures to be used for a candidate in demonstrating that he or she is:

   a) an educated person.

   b) proficient in the subject in which certification is to be granted.

   c) capable of working with children in ways which will enhance their opportunities for learning.

4. Each Trial Project must establish a management system to:

   a) provide continuous data on student progress.

   b) provide data on the interrelationships of program components.

   c) determine accountability for each aspect of the program.

   d) serve as a basis for program evaluation.

In 1972 the New York State Education Department, Division of Teacher Education and Certification established 12 experimental Trial Projects. Each Trial Project was concerned with a different area of certification.

At the present time, the only one of these projects which is operational is the CDMS program consisting of a joint effort between Cheektowaga Central School District, D'Youville College, Medaille College, and Sloan Central School District. This program is concerned with the certification of teachers for elementary schools. The first 25 students (16 from Medaille and 9 from D'Youville) began the program in January 1973, and a full-time director, Dr. Walter Bukowski, was appointed by the Policy Board effective September 1973.

An evaluation of the CDMS program after approximately a year of operation would be desirable for several reasons. First, it would provide information on how the program could be improved. Second, it would help fulfill the requirement established by the State Education Department for evaluation of the Trial Projects. In addition, it would provide a basis of evaluation that could assist other Trial Projects and attempts to implement PBTE and CBC programs by describing and evaluating the strengths of the CDMS operation and the lessons learned in developing such a program.

At present, there is very little research to substantiate most of the practices involved in or proposed for a PBTE or CBC program. Many valid issues both pro and con are raised and discussed, but there is precious little empirical evidence and only a weak theoretical structure to guide the development of an operational program. Therefore, the proposed evaluation could provide the beginning of a data base and theoretical structure for the development, operation, and evaluation of PBTE and CBC programs.

Many different types of issues, both theoretical and practical, are raised by the concept of PBTE and CBC. For example, on a more theoretical or basic-research level there are questions such as the specific types of teacher behaviors (or characteristics of the learning environment in a more general sense) are best for fostering specific types of learning objectives in the students, and the optimal number of objectives or criteria for evaluating or making decisions regarding the competency of an individual (a potential teacher in the present context). On a more applied or practical level are questions regarding the extent to which teachers completing a PBTE and/or CBC program compare in various ways with teachers prepared and evaluated under more traditional programs, the concerns for what the objectives of a PBTE and/or CBC program should be, and the extent to which the actual operations of a program are consistent with its stated objectives.

Answers to many of these questions will require extensive, long-range, and long-term research, development, and evaluation attempts. However, the CDMS program is already in operation, and an evaluation of the program at the present time would not only facilitate the operation of the program, but it would also point the direction which future research and development activities might take. While the scope of the proposed evaluation will be quite limited in nature, it could be the first step in a long-range research and development effort for PBTE and CBC programs in general and CDMS in particular.

In discussing the CDMS program with Dr. Bukowski, several aspects of an evaluation have been formulated. It appears that the most effective form of evaluation at the present time would be one which would contribute to and facilitate the still formative stages of the program. Therefore, the proposed evaluation consists of two primary objectives:

1. A description of what the program should be. Currently there does not appear to be any complete statement about the program's objectives, organization, development, and process; this part of the evaluation is valuable for two reasons:

   a) it would help to clarify to those within and without the program what they think they are and/or should be doing.

   b) it would set up criteria and direction for further evaluation.

2. A description of what the program actually is. This may be rather different from what it is felt the program is or should be as discussed in the paragraph above. This description would provide the basis on which to make recommendations for revision of the program and also help to establish the important variables in the program so that future evaluation might attempt to relate the PBTE/CDMS program with its outcomes.

The thrust of the proposed evaluation is formative in nature. That is, an attempt will be made to determine the strengths of the program as it now operates, as well as the aspects needing revision, and to make recommendations for development of a management system (according to the guidelines established by the State) which could provide continuous feedback on the program, its components and effects. It is felt that the current developmental state of the CDMS program would benefit most from this

type of loosely structured evaluation. However, the objectives of the evaluation are relatively precise.

There are at least five major steps which would be involved in the proposed evaluation:

1. Pilot work/study. This would essentially entail:

   a) meetings or interviews with several key people (e.g., an intern, a supervisory teacher, a board member, etc.) at all levels of the CDMS program. The focus of these meetings would be the identification of key variables, issues, and questions on which to base the survey instrument.

   b) the development of the survey instrument. Depending on the questions raised in 1a above, there may be more than one questionnaire, i.e., it may be more appropriate to ask some questions of the student interns and others of the board members. Undoubtedly, there will be some questions of interest to all involved.

2. Administration of the survey. There are few enough involved in the program so that including all participants in the survey should be feasible.

3. Data analysis.

4. Data interpretation. This would involve answering such questions as: (1) What do the findings mean for the CDMS program? and (2) What do they mean for development of other similar programs?

5. Writing a report presenting the findings of the evaluation along with recommendations for improving the program and possible forms which future evaluations and research and development activities might take. One section of the final report will be concerned with placing the nature and characteristics of the CDMS program in the context of current theory and practice in PBTE and CBC.

Perhaps, it should be re-emphasized that the objectives of the evaluation are basically two-fold: (1) an attempt will be made to describe as precisely and as thoroughly as possible what the CDMS program should be according to the State mandates, Policy Board mandates, and what limited evidence and theory is available regarding PBTE and CBC, and (2) what CDMS actually is according to the perceptions of the program participants and observations made by the individuals conducting the evaluation. These descriptions and their discrepencies will be used to make recommendations for program revisions.

The methodology for the evaluation is necessarily sparse in specific detail at this point. It is not possible to outline the particular areas to be covered by the questionnaire(s) until the pilot work has been completed. The evaluation questions will be responsive to the needs of the program, as well as to the State guidelines and Policy Board objectives. In addition, the evaluation will provide information which will lead to recommendations regarding the management system discussed in Standard IV of the State guidelines, particularly in regard to the establishment of continuing program evaluation.

Unless unforeseen problems arise, the evaluation could begin on or about February 18, 1974 and be completed by June 30, 1974.

Educational Research Center--The Educational Research Center of the State University of New York at Buffalo is an organization concerned with research in various aspects of teaching and education. It has an ongoing

interest in the development and evaluation of innovative programs in education. One of its major thrusts at the present time is in the area of competency-based educational programs including PBTE and CBC. The director is an educational psychologist whose major area of interest and expertise is human learning and the application of psychological principles to teaching and education. The research assistant currently working for the Center is a doctoral student who has had experience in survey research and has specialized in the study of evaluation of educational programs. An additional research assistant will be hired to assist in the proposed evaluation, if it is funded.

Proposed Budget

	Contributed by ERC	Contributed by State, etc.
Project Director (5% for 4 months)	$ 400	
Research Assistant (1/4 time--10 hours per week for 4 months)	600	
Research Assistant (1/2 time--20 hours per week for 4 months)		$1,200
Paper and supplies		100
Preparation of final report		100
Total	$1,000	$1,400
Overhead (20% of total)		280
		$1,680

Appendix B

A New Style of Certification

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
Division of Teacher Education and Certification
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A NEW STYLE OF CERTIFICATION

Introduction

In a rapidly changing society in which "old ways" are continually challenged for their relevance and validity, questions are being raised concerning the appropriateness of traditional educational patterns. Some of the questions which particularly concern the Division of Teacher Education and Certification focus on the relevance of teacher preparation and certification to teaching competence, and the accommodations to admit to teaching persons whose knowledge and teaching ability are achieved through a different set of experiences than those now prescribed for certification.

Support continues to grow for the concept that certification should be based on a teacher's demonstrated abilities instead of being based solely on his completion of a formal collegiate program. This concept is nurtured by recently developed methods for analyzing a teacher's classroom performance, e.g. Flanders, etc., and further supported by the growing concern for accountability.

Believing that the above mentioned questions and developments are worthy of serious consideration and careful response, the Department is proposing a set of process standards to be followed in developing trial projects in teacher education which will lead to a certification that signifies a measure of competence.

The term "process standards" is used to describe this system since the emphasis is on the procedures to be followed in developing meaningful

criteria to be met by prospective teachers.

The process standards promote a system of accountability because they require that those responsible for each phase of a trial project be clearly identified.

They provide for a number of agencies to combine resources and efforts to evolve acceptable criteria for teacher certification. Such criteria must be broad enough to identify qualities desirable for all teachers, yet specific enough to identify teachers who can perform well with regard to particular stated objectives and priorities of a school or region.

The process standards are interrelated; one cannot be considered independent of the others, and all process standards will be considered interdependently when trial projects are evaluated.

The standards provide for continual review and revision of programs through a managerial system which requires follow up and feedback for purposes of program improvement. They also are designed to require recognition of appropriate learning regardless of how or when the learning took place.

Trial projects may be designed for initial or continuing certification or both.

For initial state certification the cooperating agencies must certify that the candidates have--

(a) Demonstrated their ability to meet the certification competencies established by the cooperating agencies for initial employment; and

(b) Earned a bachelor's degree in fields where such degrees are now required for provisional certification.

For continuing state certification the cooperating agencies must certify that the candidates have--

(a) Demonstrated their ability to meet the certification competencies

established by the cooperating agencies for continued employment; and

(b) Earned a bachelor's degree in fields where such degrees are now required for provisional certification.

The following process standards are as firm as they can be at this time. Because they are "process" standards it is expected that they will not be static. The dynamics of the implementation of the standards in the trial projects will likely have an effect on the standards themselves.

STANDARD I

Trial projects leading to state certification must be planned, developed, monitored, and evaluated by cooperating agencies acting as a Policy Board. Representatives of the following agencies must be included:

a. public schools--representative(s) approved by the board of education

b. institutions of higher education--representative(s) approved by the chief administrative officer

c. teachers--representative(s) elected or selected by the teachers in the participating district(s), additional persons representing national or state teachers groups may be included

d. teacher education students--representative(s) selected from and approved by such students.

Representative(s) of other agencies may be included, e.g., interested lay citizens.

COMMENT:

The representatives of these agencies will establish a Policy Board with responsibility for all aspects of the development of criteria and the ultimate development of programs.

The appropriateness of the criteria and the quality of the program will be a reflection of how well the agencies have been able to work together. Functioning together will not be easy: *

1. Although each agency approaches the situation with a desire to improve the quality of professional service through better programs of preparation, each agency comes--

   a. From a context offering different background and

experience, and giving each a unique perspective of the purpose and function of preparation;

b. With unique access to or control over resources necessary to make any cooperative work; and

c. With unique limitations on the time, energy and resources it can afford to spend developing and implementing preparation programs.

2. Each agency will insist and must be assured that there will be parity both in the power to influence decisions and in the assumption of responsibility for implementing the decisions.

It might be easier to envision the four or more agencies functioning together if it could be acknowledged that different kinds of cooperation will be necessary to satisfy different needs. In a sense the agencies will perform at least three different roles:

1. PLANNING: Here all groups should be involved equally; cooperation is basically informal. The initiative to begin may be taken by any agency, but each of the other agencies should be involved to form the Policy Board as soon as possible to assure parity. The State must be formally informed of the establishment of the Policy Board.

2. CRITERIA DEVELOPMENT: Here formal adoption of policies that affect the development of criteria must take place.

3. IMPLEMENTATION: Here action must be taken by formal representatives of each agency who will commit the resources of the agency. Representatives must have the authority to act within well-defined parameters. It is at this level that the unique perspectives, resources, and limitations of each of the agencies must be fully considered and accommodated as the representatives work

toward finding the common ground on which policies and procedures can be based.

This role also involves the effective management of the resources of each agency in implementing policy. Here clear delineation of responsibility and accountability for specific aspects of the adopted procedures is essential. One or more agencies may be given responsibility for coordinating aspects of the criteria development. Such designations should be clearly established by the Policy Board.

The State does not assume that student representatives will play the same role as the college representatives or vice versa, but the State believes that each should be equally represented on the policy group. Also the role of students in programs developed for initial certification may be different from that of programs developed for continuing certification; however. in both cases student representatives should be on the Policy Board so that decisions are never made in isolation from the persons who will be affected by those decisions.

Logical relationship should exist between the development of initial and continuing criteria for certification. While interested groups may develop programs for either initial or continuing certificates, as soon as possible such groups should develop formal relationships between the two areas of certification.

The essence of cooperation requires that all parties have opportunities to present their viewpoints prior to the making of decisions, and that they continue to participate after decisions have been made.

Specific opportunities must be provided for "input" from various agencies of society directly concerned with the schools. In particular, the agencies are encouraged to seek the counsel of the professional associations

representing specialized fields (e.g., New York State Council of Teachers of English) when planning programs in specific areas.

The mandating of representation from four specific groups should not discourage the inclusion of additional agencies. While most programs would undoubtedly be improved by the participation of additional agencies, the State does not feel it is desirable or possible to mandate the appropriate additional agencies.

The cooperating agencies must understand the role of the teachers in the certification area under discussion and be able to locate and use appropriate research dealing with the preparation of school personnel.

* Certain phrases and concepts included in this comment appear in the "1971 Standard for the Preparation and Certification of School Professional Personnel" in the State of Washington, March 1, 1971.

STANDARD II

The cooperating agencies must, by their actions, address the following questions:

a. What are the stated objectives and priorities of the schools involved?

b. What competencies should a teacher have to serve in those schools?

COMMENT:

In considering the objectives and priorities of a school system, cooperating agencies may avoid the narrow confines of traditional boundaries by reviewing the following statement made by Commissioner Nyquist on humanistic education:

> Humanistic education is simply a way of looking at the world which emphasizes instead of money and things, the importance of man, his nature and central place in the universe; which teaches that all persons have dignity and worth, and that man was made just a little lower than the angels; studies that provide joy in learning, pleasure in creating, and a sense of self; programs that make a critical examination of the quality of life and society in the United States and what can be done about it; studies that lead to a repair of our ravaged environment and solve our social malignancies; that satisfy one's emotions and aspirations in an age of feeling and of a sensate culture; that lead to the development of a personal life-style, celebrate spontaneity, and make one fully human. We need to redress the value imbalances of a technological and materialistic society, with its emphasis on goods rather than the good things of life.

The time expended to develop the criteria described in this standard may be lengthy, but the effort is fundamental to the development of criteria for teachers.

It is essential that each of the agencies subscribe to the statement of objectives and priorities of the schools which is finally established. The competencies that the individual teacher is expected to demonstrate are then related to these objectives and become the criteria for obtaining a certificate and designing the preparatory program.

In dealing with the competencies necessary for the initial certificate, the cooperating agencies should focus on the performance expected of

beginning teachers. The competencies for the continuing certificate should focus on the performance expected of the experienced teacher.

STANDARD III

A. The cooperating agencies must specify the evidence that they will accept and the manner in which they will ascertain that the prospective teacher has reached an acceptable level of competence. It is expected that there will be evidence to show that, in the development of objectives, consideration has been given to insuring that the teacher is--

1. An educated person;
2. Proficient in the subject in which certification is to be granted; and
3. Capable of working with children in ways which will enhance their opportunities for learning.

B. Individualized opportunities must be provided by the preparatory program for the candidate to gain and demonstrate the competencies necessary for certification.

COMMENT:

This standard requires the establishment of explicit criteria that the candidate must meet. The emphasis is on what the teacher must be able to do rather than on any courses completed. In determining the criteria, specific reference should be given to the tasks that the teacher will be expected to perform, for example, the various roles of the elementary teacher, the biology teacher, the English teacher, etc.

In developing evidence as suggested in Standard III, part A, the cooperating agencies should give consideration to command of subject matter (knowledge criteria), teaching behaviors of the student-in-preparation (performance criteria), and the achievement of pupils taught by the student-in-preparation (product criteria). The evidence must be consistent with the objectives and priorities established in Standard II.

Continued concern must be given to the relationship of teacher behavior

to pupil behavior, difficult as that is to determine with sureness. Data must continue to be sought on the nature of the relationship between teachers and pupils so that product criteria can ultimately become part of the program.

Each teacher education student accepted in the trial project should be given immediate opportunities to demonstrate his or her ability to meet the certification criteria which shall be known to the candidate. If the student is unsuccessful in his initial attempt to meet the criteria, the preparatory program is responsible for providing appropriate means for that person to develop competence which will enable him to meet the criteria on subsequent assessment. Cooperating agencies are encouraged to devise their own approaches as long as there is evidence that provision is made for individualization and that feedback from monitoring and evaluating will be used as a basis for the continuous revision of the program.

STANDARD IV

A management system must be established for the following purposes:

a. To provide continuous data on student progress

b. to provide data on interrelationships of program components

c. to determine accountability for each aspect of the program

d. to serve as a basis for program evaluation.

COMMENT:

The need for a managerial system is based on the following premises:

a. The individual should be the primary focus of the program. Without a carefully designed and publicized system of operation the student may find his freedom and opportunities to learn restricted and possibly even misdirected.

b. In order for a program to operate efficiently, each phase of the operation must be planned in relation to all other aspects of the program.

c. Lines of responsibility must be drawn clearly to insure accountability.

d. The trial teacher education projects must be designed to include continuous evaluation and feedback into the program. This can be achieved if the evaluation system includes: (a) Self-assessment by all agencies responsible for any phase of the program; (b) concomitant and/or subsequent review by appropriate and concerned State Education Department staff; (c) invitation to outside review agencies; and (d) encouragement of active participation in the assessment process by other concerned groups.

ROLE OF THE STATE EDUCATION DEPARTMENT

The Department intends to participate fully in the deliberations which go into all phases of program development and implementation in order to

assist where possible and to learn. The Division of Teacher Education and Certification will draw upon the resources of the State Education Department for as many support activities as it can during the development of programs. Such activities may include consultative services, training sessions, and the preparation and dissemination of appropriate publications.

The Department will not abdicate its legal responsibility in exercising its approval function. It will also take an active part in the total evaluation of the trial projects. Evaluation of the projects will include an assessment of the role of the State Education Department.

March 15, 1971

Appendix C

History of CDMS Program Development
(CDMS "Trial Project" Objectives)

CDMS Program Development
Dr. Walter Bukowski, Director

Introduction

CDMS is a field centered program of competency based teacher education. It provides the necessary experiences of pre-practicum and practicum for provisional certification to teach the elementary grades in New York State. Those college students who are admitted to the program are expected to complete such requirements within two college semesters. CDMS is a cooperative undertaking that includes two small private colleges from the City of Buffalo, D'Youville College and Medaille College, and two moderate-sized school districts located in a nearby suburban area. They are Cheektowaga Central School District No. 1 and Cheektowaga - Sloan Union Free School District No. 9. The acronyne, "CDMS", stands for the first letter of each participating institution.

Origins

CDMS began in the Spring of 1972, as a response to a memorandum of an Assistant Commissioner of the New York State Education Department. This memorandum announced that trial projects would be underwritten and formed to spearhead statewide movement toward competency based teacher education. Such trial projects would be expected to follow guidelines described in "A New Style of Certification" distributed by the State Education Department. These guidelines were labelled Process Standards and provided for the following:

1. That trial projects leading to state certification would be planned, monitored and evaluated by cooperating agencies acting as a Policy Board. Members of the Policy Board would include representatives of public schools, institutions of higher learning, teachers and teacher education students. Representatives of other agencies, e.g., lay citizens, might also be included. Each agency represented on the Policy Board would have parity in decision making power.

2. That cooperating agencies must address themselves to identifying the objectives and priorities of the schools involved, and well as identifying necessary competencies of teachers who serve in those schools.

3. That the cooperating agencies specify the evidence that they will accept and the means that would be used to ascertain whether a prospective teacher has reached an acceptable level of competence. Furthermore, the preparatory program must provide individualized opportunities for the candidate to gain and demonstrate the necessary competencies.

4. That a management system be established that would: provide continuous data on student progress; provide data on interrelationships of program components; determine accountability for each aspect of the program; and, serve as a basis for program evaluation.

Sanction for actual implementation of trial projects were dependent upon compliance with the four Process Standards. This initial approval of the S.E.D. would bring temporary power to recommend candidates for teacher certification and could lead to subsequent official registration authority. In the fall of 1971, CDMS was granted approval as a trial project. It was one of twelve granted such approval from an original list of thirty-seven applicants.

The objectives of the CDMS "trial project" were stated as follows:

1. Provide alternate system for certification and plan for competency based teacher education.

2. Develop comprehensive, comptency based evaluation of prospective teachers.

3. Shift the location of a large portion of professional education from college to school district and provide the school district with an increased share of responsibility.

4. Combine field experience and theoretical studies to provide more meaningful teacher education - critical link between theory and practice.

5. Bring fullest resources of colleges and school district together to bear on teacher evaluation.

6. Better prepare cooperating teachers and school and college personnel.

7. Strengthen teacher preparation by establishing behavioral objectives and individualizing the program in terms of competencies, not time and courses taken.

8. Expand kinds of experiences - visitation, observation, participation and student teaching, working in all professional and non-professional areas with differentiated staffing in action: paraprofessionals, counselors, supervisors, administrators, researchers, curriculum developers, teachers.

9. Provide earlier initiation to teaching and the opportunity for earlier vocational decisionmaking.

10. Extend practical, in-school teacher education--providing more time, more experiences, and spaced learning.

11. Plan overall evaluation (including followup) of the effectiveness of the new teacher education program and its component elements.

Early Development

From the start, program participation included college students, college staff, classroom teachers and administrative staff of the cooperating institutions. It is apparent that there was a serious commitment on the part of all participants. It must also be pointed out that a great deal of time was expended in this trial project by the two superintendents of the school districts and the Vice Presidents and a Dean of the colleges. Surely, this inspired and stimulated the other participants of the project. Lay citizens of the two school districts became regular participants in the fall of 1973 when they were fully represented on the CDMS Policy Board.

As related earlier, the trial project was begun in the spring of 1971. During that summer a proposal requesting approval as a trial project was submitted to the State Education Department. It contained the fruits of many long meetings and conferences such as: trial project objectives, a format of organization and a proposal budget. Tentative plans for operation indientifed personnel needs to include: a part-time coordinator from each of the four institutions; college instructors to service six content areas; college supervisors and cooperating teachers. It was anticipated that twenty students would be selected for the project's initiation in January of 1973. Later, this number was increased to twenty-five. Each institution would contribute available in-kind services and handle the salary responsibilities of their personnel assigned to the project.

In the fall and winter of 1971. previously determined pupil competencies, or objectives, of elementary schools of the two districts were used to guide the identification of needed teacher competencies. A definition of "CDMS Teacher Competencies" emerged for purposes of program development. It was also decided to utilize a module approach as a delivery system for the acquisition of competencies by interns. At this time it was established that Policy Board decision-making would be based upon parity among participating agencies. State funding for trial projects was set at $8000 for the first year and $1500 for subsequent years until termination of trial project status. It was understood that trial projects had a limited longevity. The CDMS Policy Board decided that payment for module development by involved professional personnel would be derived from S.E.D. stipends.

Activities of 1972 centered upon program development and plans for its implementation. To this end, numerous meetings and conferences were held. A number of consultants and advisors were utilized who were experienced in the area of competency based teacher education. Workshops conducted that summer produced substantive material for module components of these six areas: psychology of learning, reading, mathematics. language arts, social studies and science. Related formal instructional activities would be conducted

in the field by instructors of the two colleges. Other pertinent guidance would be handled by college supervisors and the supervising teachers. During this period, a handbook for program implementation was compiled and attempts were made to anticipate problems of administration. Toward the end of the year, arrangements were finalized for an early evaluation of the program by an outside agency.

At last, after nineteen months of preparation, CDMS became operational with the matriculation of twenty-five students in January 1973. Considerable efforts were extended to orient the new interns and also, to provide for continuous assessment of the program. Nonetheless, a number of problems appeared along with many concomitant frustrations. It appeared to most participants that there was an absence of adequate administration and management. Additionally, certain anticipated expectations or outcomes might have been unrealistic in light of prevailing realities. For instance, the total absence of participating personnel who had actual experience in actualizing CBTE, In the spring, State Education Department recommendations were instrumental in the decision to revise and improve the program's modules. At this same time plans were made to develop four new additional module components for the areas of art, music, audio-visual aids and sociology. The latter area was made a part of the program laregely to accommodate certain requirements at the two colleges. Subsequent activities in the summer produced the module revisions and the additional module components. Monitoring outcomes by the S.E.D. were also influential in effecting revision and formalization of by-laws for the CDMS Policy Board, as well as for the appointment of a full-time Director of the program for September 1973. In addition to other duties, the Director assumed the functions of the four part-time coordinators.

Activities that fall centered upon: program administration and organization; on-going assessment and remediation of the program; and, the nurturing of an evolving management system. At the end of the fall semester, sixteen interns had completed all requirements of the program and provisions were made for the continuation of required work by eight remaining interns. One intern had dropped out of the program upon completion of the spring semester. By late fall, plans had been completed for the entry of twenty-five new interns into CDMS Program in January 1974.

Appendix D

Interview Questions

Interview Questions

1. Has Dr. Bukowski spoken with you as to why we are here?
2. What are your general impressions of the CDMS program?
3. Why are you participating in it?
4. What are the objectives of the program from your perspective?
5. How is this program different from other programs you have participated in?
6. How are the student teachers different from other student teachers you have worked with in other programs?
7. Are they more prepared for student teaching than other student teachers are? If so, why do you think they are?
8. Are the CDMS student teachers better in the classrooms than the other student teachers?
9. How do CDMS student teachers' attitudes compare with regular student teachers?
10. Do you feel attitude plays an important part in the program?
11. Are the modules difficult to adjust to in your classroom?
12. Are they more efficient than other plans of teacher education in student teaching?
13. How would you change them to be more helpful to both student and supervising teacher?
14. Are the student teachers benefiting from the module plan as it is as much as they could from another type of plan?
15. Do the modules cover all the things that the student teachers are required to do in the classroom?
16. Are you pleased with the communication lines in the CDMS program?
17. Do you have regular meetings with college supervisors?
18. Are the roles clearly defined?
19. Do you have direct access to Dr. Bukowski?
20. Would you like to have regularly scheduled meetings with him?
21. If you make a suggestion in regard to the program, do you feel it is fairly evaluated, and if deemed valid, is it acted upon?
22. Do you feel any commitment to the program beyond that of a supervising teacher?
23. Do you feel that the program could benefit all student teachers if implemented as it is at the present time?
24. How could the program be improved?
25. What is your definition of Competency Based Teacher Evaluation?
26. Would you say the CDMS program is better than the regular teacher education programs that have been offered in the past and are now being offered at most institutions?
27. What are the programs good points?
28. What are the programs bad points?

Appendix E

Memorandum to CDMS Participants Explaining Purpose of Evaluation and Introducing Evaluation Personnel

MEMORANDUM

TO: All Participants of CDMS Program

FROM: Walter Bukowski, Director

SUBJ: Program Evaluation by S.U.N.Y.A.B. Staff

DATE: March 21, 1974

As you may know, the CDMS Program is undergoing the preliminary phases of an evaluation by an outside agency, in this case the Educational Research Center of the State University at Buffalo. This assessment will provide an analysis that should provide direction to our efforts of improving the CDMS Program. The evaluation is under the leadership of Dr. Thomas Shuell, Director of the Educational Research Center and an educational psychologist at the State University. He will be assisted in the field by three doctoral students who will conduct interviews and gather data for the study. These are:

Patricia Coye,
Bruce Kestelman, and
Betsy Ramsdell

All three are certified teachers who have had teaching experience. Hopefully, this undertaking will begin a continuing and mutually rewarding relationship with the Educational Research Center of S.U.N.Y.A.B.

Since open and full cooperation of CDMS participants is needed for the success of this venture, the following points seem pertinent:

1. No individual has need to feel threatened in any way during the course of this investigation. It is the program not any individual that is under scrutiny.

2. Responses to interview questions should be frank and objective. No one should feel a need to shield the program from possible criticism that may well become bases for improvement of the program.

3. Finally, if you have any question about the evaluation while it is in process, feel free to contact me about it.

Appendix F

Evaluation Questionnaire

May 1974

CDMS QUESTIONNAIRE

The purpose of this questionnaire is to gather information on the present operation of the CDMS program as seen from the perspective of the various participants in the program. It is important that you indicate your honest reaction to each item; the questionnaire is completely anonymous. Please read each question carefully and indicate the alternative which best represents your reaction to that item. Most of the items ask you to indicate the extent to which you agree or disagree with a statement by selecting one of the following alternatives:

SA -- Strongly Agree with the statement

A -- Agree with the statement to some extent but with some reservation or qualification

D -- Disagree with the statement to some extent but with some reservation or qualification

SD -- Strongly disagree with the statement

NA -- This item does not apply to me

Please use the NA alternative only if the item clearly does not apply to you, e.g., the item applies to some one else in the program, or if you have no information about the item. In all other cases please select one of the four alternatives indicated. If you are unsure of how you feel or tend to feel neutral about the statement, indicate the alternative you feel--for whatever reason--is most clearly indicative of your views. Please answer all questions. It should take you between 20 and 30 minutes to complete the questionnaire. Thank you for your cooperation and assistance.

Background Information

1. In what ways do you or have you participated in the CDMS program?

_____ College administrator
_____ Intern
_____ Co-operating teacher
_____ Field supervisor
_____ College instructor
_____ School district administrator
_____ Floating teacher (co-operating teachers without specific interns assigned to them)
_____ Field specialist (specify)_____
_____ Other (specify) _____

2. Additional activities (please indicate the dates you served in these positions):

_____ Policy board
_____ Curriculum committee
_____ Certification committee
_____ Ways & means committee
_____ Social committee
_____ Program design subcommittee
_____ Other (please specify) _____

3. If you are an intern, college instructor, field supervisor, or college administrator, please indicate the college you are associated with:

_____ Medaille _____ D'Youville

4. If you are a co-operating teacher, principal, floating teacher, or field specialist, which school district are you in?

_____ Cheektowaga _____ Sloan

5. Years teaching experience: _____ Are you tenured? Yes ____ No ____

6. If you are a co-operating teacher

how many CDMS interns have you been assigned? _____
how many regular student teachers? _____

If you are a floating teacher, how many regular student teachers have you been assigned? _____

7. Age:

_____under 20	_____36-40	_____56-60
_____21-25	_____41-45	_____61-65
_____26-30	_____46-50	_____over 65
_____31-35	_____51-55	

8. Sex: _____Male _____Female

9. During what periods have you participated in the CDMS program? (check as many as applicable.)

1971: _____Spring semester
_____Summer
_____Fall semester

1972: _____Spring semester
_____Summer
_____Fall semester

1973: _____Spring semester
_____Summer
_____Fall semester

1974: _____Spring semester

Program Orientation and Preparation

10. I am a participant in the CDMS program because:

_____ I believe in the program concepts.
_____ I had no alternative.
_____ this type of program seems inevitable.
_____ it will provide better job opportunities for me.
_____ I did it as a favor to someone else.
_____ I like to become involved in new and experimental programs.
_____ Other (please specify) _____

_____

11. How were you initially prepared to participate in the CDMS program?

_____At a formal meeting.
_____Informally by someone who is in the CDMS program.
_____Informally by the principal of my school.
_____By means of written materials.
_____By fellow students.
_____By a college professor.
_____By a field supervisor.
_____There was no form of preparation.
_____Other (specify) _____

_____

12. If at all possible, I will participate in CDMS in the future.	SA	A	D	SD	NA
13. The co-operating teachers were adequately prepared to work with "interns" as opposed to working with student teachers.	SA	A	D	SD	NA
14. The interns are adequately prepared for their experiences in the classroom.	SA	A	D	SD	NA
15. Orientation for participation in CDMS was adequate.	SA	A	D	SD	NA

Objectives

16. The objectives of CDMS are clear to me.	SA	A	D	SD	NA
17. CDMS seems to be achieving its major objectives as I understand them.	SA	A	D	SD	NA

18. There is a conflict between the objectives of my school/college and the objectives of the CDMS program. SA A D SD NA

19. There is a conflict between my job-related priorities and the demands required by the CDMS program. SA A D SD NA

20. Listed below are various elements that have been suggested as being an important part of a Competency-Based-Teacher-Education (CBTE) program. In column #20, rank the elements which you think are the most important for any competency-based-teacher-education program. (Use 1 for the most important, 2 for the next important, 3 for the third most important, etc.) Put a X in the blank if you do not understand the meaning of the element.

#20		#21
_____	competencies (knowledge, skills, and the behaviors) to be demonstrated by graduates are stated so as to make possible assessment of student's behavior in relation to specified competencies.	_____
_____	Criteria to be employed in assessing competencies make explicit expected levels of mastery under specified conditions.	_____
_____	Assessment of student's competence uses his performance as the primary source of evidence.	_____
_____	Student's progress is determined by demonstrated competence, rather than by time or course completion.	_____
_____	Emphasis on exit, not entrance requirements.	_____
_____	Field-centered.	_____
_____	Personalized, individualized instruction.	_____
_____	Modularized instruction.	_____
_____	Multi-institutional pattern of organization.	_____
_____	Formative feedback to student regarding his progress.	_____
_____	Pre-service--in-service continuum.	_____

21. Using the elements listed in #20, rank order in the same way each element according to how much emphasis you think is actually placed on that element in the CDMS program. Use the blanks in column #21, and put 1 for the most emphasis, etc.

22. The school district has assumed a greater share of the responsibility in the preparation of the student interns in CDMS than they had under previous programs of teacher education. SA A D SD NA

23. More preparation for participation in the CDMS program may be needed. Check the ways which you think would be the most appropriate for interns and for supervising teachers.

For Interns	For Supervising Teachers	
_____	_____	no more orientation is needed
_____	_____	explained more thoroughly by participants in CDMS
_____	_____	a concise handbook covering pertinent aspects of the program
_____	_____	a workshop held during the summer
_____	_____	an initiation meeting held during the first week of the semester
_____	_____	several days of orientation just prior to the beginning of the semester
_____	_____	other (specify) _____

_____

Communications

24.	There is a systematic method for the dissemination of CDMS program information.	SA	A	D	SD	NA
25.	Regular meetings with other CDMS participants would be helpful.	SA	A	D	SD	NA
26.	It is clear to me who can help me with problems regarding aspects of the CDMS program. Please list the positions of the first two people to whom you turn for help (field supervisor, principal, teacher, etc.)	SA	A	D	SD	NA
		1) _____				
		2) _____				
27.	The lines of communication in the program are well-defined and clearly understood.	SA	A	D	SD	NA
28.	The lines of communication are easily accessible.	SA	A	D	SD	NA

29. I have used these lines of communication.

____very often ____often ____rarely ____never

Role Definition

30. On the average, how much time per week do you spend in activities related to the CDMS program?

_____ 1 hour or less
_____ 1-3 hours
_____ 3-5 hours
_____ 6-10 hours
_____ 11-15 hours
_____ 16-20 hours
_____ 20 or more hours

31. Where is the majority of this time spent?

_____ on the college campus
_____ in the school classroom
_____ in the school, in locations other than the classroom (meetings, library, etc.)
_____ at home
_____ other (specify) _____

32. CDMS requires more of my time than did prior methods of teacher education/ preparation. SA A D SD NA

33. What do you spend the majority of your time doing in relation to CDMS activities? Place a 1 next to the most time-consuming activity, a 2 next to the next highest, and a 3 next to the next. CHOOSE ONLY 3 ACTIVITIES.

_____(a) evaluating completed modules
_____(b) completing modules
_____(c) observing students or teachers
_____(d) doing library research
_____(e) planning and preparing lessions
_____(f) actual teaching on a formal basis (classroom, small group, seminar)
_____(g) teaching on an informal basis (remedial, unplanned helping, etc.)
_____(h) talking to other program members about the program: advising, problem-solving, complaining, facilitating
_____(i) committee and or policy board participation
_____(j) other (specify) _____

34. Of the activities listed in #33, what do you think should be the highest priority and the second highest priority for the following participants (write the letter corresponding to the activity):

for the intern:

highest priority_____
next priority _____

for the co-operating teacher:
highest priority____
next priority _____
for the college instructor:
highest priority_____
next priority _____
for the field supervisor:
highest priority_____
next priority _____

35. Listed here are the titles of the CDMS program participants. Write the corresponding letter of the participant whom you now perceive actually has the major responsibility for each of the following activities. (Use the blanks on the left.)

a) policy board members
b) program director
c) school superintendents
d) co-operating teachers
e) college instructors
f) field supervisors
g) interns
h) other (specify in the blank)
i) a committee (specify in the blank)
j) no one has the major responsibility for this activity
k) I do not know who has the major responsibility

Activities:

#35		#36
_____	evaluating and signing of modules after completion	_____
_____	completion of the modules	_____
_____	overseeing the completion of the modules	_____
_____	record-keeping regarding module completion	_____
_____	teaching the interns about teaching	_____
_____	making decisions about program changes	_____
_____	implementing program changes	_____
_____	guiding and facilitating and structuring the intern-co-operating teacher relationship	_____
_____	determining the needs of the intern for learning and teaching experiences	_____
_____	overseeing the intern-pupil relationships	_____
_____	determining the objectives for the CDMS program	_____
_____	determining the objectives for the modules	_____
_____	helping solve the various problems of the intern	_____
_____	helping solve the various problems of the co-operating teacher	_____
_____	monitoring the needs and problems of the program as a whole	_____

#35		#36
_____	facilitating communication among program members	_____
_____	evaluating the intern's teaching abilities	_____
_____	instructing interns about educational theory	_____

36. In the blanks to the right of the activities listed above, write the corresponding letter of the participant who you think <u>should</u> have the major responsibility for that activity. (These may be the same or different from your answers in #35.)

<u>Attitudes</u>

37. I feel isolated from CDMS personnel at other levels in the program. SA A D SD NA

38. When I entered the CDMS program, my attitude toward it was

_____ strongly positive
_____ positive
_____ neutral
_____ negative
_____ strongly negative

39. At present my attitude toward the program is

_____ strongly positive
_____ positive
_____ neutral
_____ negative
_____ strongly negative

40. I will not continue in the CDMS program unless some additional remuneration is provided. SA A D SD NA

41. Rank the following three types of remunerations, with 1 being the most preferable. Add other suggestions for remuneration in the last blank.

_____ a specified amount of money
_____ a tuition waiver at one of the state colleges or at D'Youville or Medaille
_____ time free from teaching
_____ other (specify) _____

_____

42. I feel that my ideas and criticisms about the program are taken seriously. SA A D SD NA

43. I feel very committed to the CDMS program. SA A D SD NA

44. If I could make the decision about participating in the program over again, I would still participate. SA A D SD NA

45. Which of the following changes do you think are most important to make in the modules? (Check as many as are appropriate)

_____ no changes
_____ eliminate some modules (specify) _____

_____

_____ eliminate no modules, but cut down on module length
_____ improve the quality of some of the modules (specify which ones)

_____

_____ change the nature of the modules (specify) _____

_____

46. Which of the following modules, if any, do you think should be completed before the intern enters the field experience? (Check more than 1 if appropriate)

_____ none should be completed beforehand
_____ interaction in the classroom
_____ art education
_____ audio-visual
_____ language arts education
_____ mathematics education
_____ music education
_____ psychology of learning
_____ reading
_____ science education
_____ social studies education
_____ other (specify) _____

47. Modules can be evaluated and signed by which of the following? (Check more than 1 if appropriate)

_____ program director
_____ school superintendent
_____ co-operating teachers

_____ college instructors
_____ field supervisors
_____ interns
_____ other (specify)_____

48. To a program in competency-based education, do you think modules are

_____ very essential
_____ essential
_____ somewhat essential
_____ not essential

49. The completion of the modules is more important for the interns than other work in the classroom. SA A D SD NA

50. My module work sometimes suffers because I am really committed to the classroom program. SA A D SD NA

51. The modules allow for the intern's individual working and learning style. SA A D SD NA

52. If an intern, how much time do you spend on the average per week completing the modules?

_____ 1 hour or less
_____ 1-3 hours
_____ 3-5 hours
_____ 5-8 hours
_____ 8-10 hours
_____ 10-15 hours
_____ over 15 hours

53. If you are a participant other than an intern, how much time do you spend reading/observing/evaluating the completed modules?

_____ none
_____ 1 hour or less
_____ 1-5 hours
_____ 6-10 hours
_____ 11-15 hours
_____ 16-20 hours
_____ over 20 hours

54. Interns are aware of their progress in the program with regard to completion of their modules. SA A D SD NA

55. Some methods courses should be taken before the intern goes into the field experience. SA A D SD NA

56. Interns perhaps need more preparation before coming into the field. This preparation should include: (Check as many as necessary)

_____ no more preparation is needed
_____ competencies in behavioral objectives
_____ lesson planning
_____ unit planning
_____ classroom management
_____ school routine
_____ knowledge about discipline techniques
_____ other (specify)_____

57.	Modules should be written to include routine classroom procedures, such as record-keeping, lunch count, etc.	SA	A	D	SD	NA
58.	The interns are prepared to conduct themselves in an acceptably professional manner when they first enter the field experience.	SA	A	D	SD	NA
59.	Interns should be required to stay in their field position until the end of the public school year.	SA	A	D	SD	NA
60.	Successful completion of the modules indicates that the intern will be a competent teacher.	SA	A	D	SD	NA
61.	First semester interns should be assigned with a second semester intern, for the purpose of peer learning.	SA	A	D	SD	NA
62.	The quality of performance for completion of a module is clearly stated.	SA	A	D	SD	NA
63.	It is more meaningful to have the interns have methods courses simultaneously with their field experience than to have them previous to their field experience.	SA	A	D	SD	NA

64. What do you consider the strongest point in the CDMS program? _____

_____

65. What do you consider the weakest point in the CDMS program?_____

_____

66. **Please add any comments below which you have about the CDMS program and which have not been elicited by this questionnaire.**

Appendix G

Cover Letter to those Distributing Questionnaires

SPECIMEN OF LETTER SENT TO "COVER" SET OF QUESTIONNAIRES

May 8, 1974

Name, Title
Place

Dear Name:

Thank you for taking care of the distribution and collection of these questionnaires.

Would you please let me know if there is any current or past CDMS participant who has not received a questionnaire, so that we may send them one.

Thank you again.

Sincerely yours,

Thomas J. Shuell
Director

Appendix H

Introductory Letter with Questionnaire

May 8, 1974

Dear CDMS participant:

As you probably already know, CDMS has contracted the SUNYAB Educational Research Center to conduct an evaluation of its program. This questionnaire is an essential part of that evaluation, and your cooperation will be greatly appreciated.

It is extremely important that you be completely honest in your comments; please remember that the answers are entirely anonymous. We wish to have a 100% response rate, so we ask you to sign a sheet when you return the questionnaire. In no way can the signatures be associated with the questionnaire answers.

If you have any questions regarding any aspect of this, please feel free to call either of us.

Please return the questionnaires by Wednesday, May 15, at the latest, to the principals at each of the schools, or to Sister Karen Kolbeck at Medaille or Sister Patricia Smith at D'Youville.

Thank you for your time and participation in helping to improve the CDMS program.

Sincerely yours,

Thomas J. Shuell
Director
Educational Research Center

Walter Bukowski
Director, CDMS

dj

Appendix I

Extra Introductory Letter for Mailed Questionnaires

May 8, 1974

Dear CDMS Participant:

Some of you are receiving questionnaires by mail. Please fold and put the answered questionnaire in the enclosed addressed and stamped envelope. Then sign the postcard and mail both separately. We need your signature in order to record who has returned the questionnaires; in no way can the questionnaire be connected with your signature.

Please complete and mail these by Wednesday, May 22. Thank you for your cooperation.

Sincerely yours,

Thomas J. Shuell
Director

TJS/dj

Appendix J

Component Objectives
(Substitute for Module Objectives)

ART EDUCATION (Art-001:CDMS, 1)

Upon completion of this component, the Intern will be able to

1.... relate an understanding of the roles of art and the art teacher in the elementary school program.

2.... relate an understanding of the role of the classroom teacher in supporting and extending the art program in the elementary school.

3.... demonstrate an understanding of the stages of children's drawings.

4.... utilize readily available materials to develop creative projects in an elementary school setting.

5.... design and construct an attractive and meaningful bulletin board display.

AUDIO-VISUAL (AV-001:CDMS,1)

Upon completion of this component, the Intern will be able to

1.... relate an understanding of the functions of media utilization within the social process.

2.... relate the theoretical premises behind the use of A-V materials in the classroom.

3.... describe the instructional capabilities and then demonstrate the actual use of the following: tape recorder, filmstrips, overhead projector, language master, single concept film loop projector, spirit duplicator, Thermofax copier, video tape, team teaching dial access/instant retrieval materials, flat pictures, maps, globes, charts, graphs, diagrams, visual displays models and mock-ups.

Language Arts Education (TLA-001:CDMS,2)

Upon completion of this component, the Intern will be able to

1.... identify those skills related to listening.

2.... plan and execute lessons on listening comprehension.

3.... demonstrate legible writing in manuscript and cursive style.

4.... diagnose the handwriting performance of elementary students and prescribe remedial steps where necessary.

5.... plan and implement lessons on manuscript and cursive handwriting.

6.... develop and conduct a reading interest survey for elementary grade students.

7.... maintain an established annotated bibliography of literature materials for the elementary grades.

8.... demonstrate skill in story-telling techniques.

9.... develop lessons in creative writing.

10.... analyze student speech patterns and plan and enact remedial action if necessary.

11.... develop and implement remedial plans for problems in spelling.

12.... maintain an established file of spelling games and activities.

Mathematics Education (MA-001: CDMS,2)

Upon completion of this component, the Intern will be able to

1.... relate the meaning of common mathematical symbols and terminology to learners of the elementary grades.

2.... plan and implement lessons at an appropriate learning level that include:

(1) the following related concepts: set, sub-set, empty set, cardinal numbers of a set, equal sets, disjoint sets, union of sets and the intersection of sets.

(2) the areas of inequalities and comparison of sizes.

(3) the areas of sequences.

(4) the facts, principles and equations of addition, subtraction, multiplication and division.

(5) place value, up to six digit numbers, numerals through trillions, base 10, base 4, exponential notation, decimal notation and rounding.

(6) positive and negative integers, prime and composite numbers, prime factors and factorization, and the symbols of Roman numerals.

(7) rational numbers, fractions, equivalent and improper fractions, lowest term fractions and least common denominators.

(8) the area of informal geometry and such related concerns as pertinent vocabulary and symbols, simple closed curves and open figures, line segments, and parallel and perpendicular lines.

(9) the following measurement areas: time, temperature, measurement systems, (standard and metric) liquid, volume, area, perimeter, and circumference.

(10) the area of graphs such as bar, circle, line, broken-line and picto-graphs, and, that include operations on coordinates of a given point, ordered pairs, and negative and positive integers.

MUSIC EDUCATION (M-001:CDMS,1)

Upon completion of this component, the Intern will be able to

1.... from music texts of various elementary grade levels, identify characteristics of melody, rhythm, harmony, form, tone color, dynamics and tempo.

2.... articulate those musical concepts needed to aid elementary grade students to enjoy and participate in musical activities such as listening, singing, moving to music, playing music and creating original music.

3.... teach a lesson incorporating those necessary skills to help students acquire a given musical concept.

PSYCHOLOGY OF LEARNING (P1-001:CDMS,2)

Upon completion of this component, the Intern will be able to

1.... identify historically important ideas about the nature of learning including: association of ideas, animal trial and error, classical conditioning, verbal association, insight and reinforcement theory.

2.... state a coherent definition of learning.

3.... understand learning and its components as enunciated by Robert Gagne.

4.... relate basic knowledge about the structures of thought, thought processes, directed thought and its components, the nature of creativity and the significance of transfer.

5.... provide an understanding about motives and motivation, the relationships between motives and behavior, and the teacher's role in the motivation of students.

6.... relate an understanding of reinforcement theory and shaping and their practical application.

7.... relate a basic understanding of the causes of classroom discipline problems.

8.... identify available control techniques for maintaining classroom discipline.

9.... apply a psychological model for establishing and maintaining classroom discipline.

10.... relate a comprehension of the common terminology in the area of testing and evaluation.

11.... identify the basic types of classroom tests and their purposes.

12.... state the distinction between measurement and evaluation.

13.... construct a test based upon previously defined behavioral objectives.

14.... describe a personal, developmental theory of instruction.

READING (R-007:CDMS,2)

Upon completion of this component, the Intern will be able to

1.... explain the four factors contributing to reading difficulties.

2.... administer and score the Peabody Picture Vocabulary Test.

3.... apply the Bond and Clymer reading expectancy formula using data from previously administered tests.

4.... administer and interpret the results of the San Diego Quick Assessment test.

5.... administer and interpret the results of the Dolch 220 list of service words.

6.... design, administer and interpret the results of a "flash test".

7.... understand the uses of the Spache, Dale-Chall and Fry readability formulas.

8.... apply the Fry readability formula to a given text.

9.... design, administer and evaluate a Cloze test.

10.... name two informal reading inventories, cite four purposes for administration of them, and be able to evaluate information derived from an IRI.

11.... design, administer and interpret an informal reading inventory.

12.... cite the seven subtests of the Durrell Analysis of Reading Difficulty, understand the rationale for administration and its limitations.

13.... administer and interpret the results of the Durrell Analysis of Reading Difficulty.

14.... prepare a case study of pupils with reading difficulties providing for appropriate diagnosis, prescription and evaluation.

SCIENCE EDUCATION (SC-001:CDMS, 2)

Upon completion of this component, the Intern will be able to

1.... articulate an anticipated methodology for teaching science in the elementary grades.

2.... evaluate his or her own individual lessons in the light of given criteria.

3.... acquire resources for the teaching of elementary science.

4.... develop lesson plans and teaching units for elementary science.

5.... actualize lesson plans and teaching units in the science classroom.

6.... plan and implement a demonstration of laboratory safety.

7.... plan and demonstrate classroom experiments.

8.... demonstrate the utilization of at least one commercially prepared science program for the elementary grades.

SOCIAL STUDIES EDUCATION (SS-001:CDMS,2)

Upon completion of this component, the Intern will be able to

1.... demonstrate his understanding of social studies methodology by identifying the following classroom techniques: questioning, value analysis, decision-making, problem-solving, discussion, dramatization, inquiry and simulation.

2.... maintain an established file of resources related to the teaching of social studies.

3.... develop and teach lessons at the primary and intermediate levels based on topics taken from the NYS Social Studies Curriculum Guide.

4.... identify those specific social sciences that comprise the inter-disciplinary social studies approach.

5.... demonstrate familiarity with the sequence of content and skills in Social Studies K - 6 in New York State.

6.... construct and implement a social studies teaching unit of at least ten lessons.

Appendix K

Teacher Competencies

CDMS Program
Intern Record of Teacher Competencies

I. DEMONSTRATES ABILITY TO WORK WITH PEOPLE THROUGH

A. Teacher-Staff Relationships

_____ 1. Establishes a good rapport with the administration staff.
_____ 2. Discusses his teaching plans with the administration and staff, seeks, accepts and uses suggestions offered.
_____ 3. Works cooperatively as a member of a curriculum and/or grade-level planning team.

B. Teacher-Pupil Relationships

_____ 1. Maintains reasonable level of expectations from pupils.
_____ 2. Retains adult status while working at pupils' level.
_____ 3. Works successfully with pupils of various backgrounds and varying abilities.
_____ 4. Shows respect for pupil opinion and suggestions.
_____ 5. Gains confidence of pupils.

C. Teacher-Parent Relationships

_____ 1. Has met with parents at PTA meetings, professional gatherings, or other parent-teacher conferences.
_____ 2. Communicates effectively with parents.

II. DEMONSTRATES SKILL IN ESTABLISHING PROPER CLASSROOM CLIMATE

A. Teacher-Pupil Interaction

_____ 1. Praises and encourages pupils.
_____ 2. Keeps lines of communication open between himself and the children, regarding their activities, interests, and concerns.
_____ 3. Recognizes the individual needs of children and develops methods of teaching accordingly.
_____ 4. Analyzes discipline situations to determine the causes.
_____ 5. Recognizes the difference between superficial student misbehaviors and those resulting from some genuine deep seated cause and dealing with each accordingly.
_____ 6. Avoiding teacher caused discipline problems resulting from use of sarcasm, playing favorites, failure to answer reasonable questions, making personal reference to pupils or community groups.

B. Cooperative Participation

_____ 1. Help students to establish clear rules and procedures for conduct.
_____ 2. Provides for discussion, participation, and pupil involvement in appropriate decision making.
_____ 3. Brings into the discussion the non-participant.

C. Well-Directed, Purposeful Activities

_____ 1. Moves to specific learning activities as group shows readiness.
_____ 2. Used methods designed to reach and maintain attention of pupils.

D. Attention to Physical Factors

_____ 1. Arranges and provides for facilities in the classroom conducive to optimum learning (tables, chairs, learning centers, bulletin boards, etc.)
_____ 2. Attends to factors of ventilation, lighting and temperature.
_____ 3. Considers and attends to factors related to pupil safety.
_____ 4. Demonstrates skill before, during and after fire drills, bomb scares and emergency situations.

III. DEMONSTRATES SKILL IN PLANNING FOR INSTRUCTION THROUGH

A. Teacher-Pupil Planning

_____ 1. Works cooperatively with pupils in specifying goals.
_____ 2. Specifies goals with clarity so that pupils understand precisely what their goals are.
_____ 3. Specifies pupil objectives in behavioral and measurable terms.

B. Lesson, Unit Planning

_____ 1. Uses a systematic process in teaching. Builds an appropriate progression and sequence of activities.
_____ 2. Makes thorough plans for long-term (unit or project) work.
_____ 3. Plans on a day-by-day basis according to on-going diagnosis.
_____ 4. Writes teachable lesson plans with: (a) definite purposes, (b) objectives (general and specific), (c) culminating activity to draw the lesson together, (d) evaluation of both pupil reaction and accomplishment.
_____ 5. Has consultations with teachers in same subject area and grade level.
_____ 6. Utilizes simple types of games and charts, lists activities and sources that will motivate the student and maintains his interest.
_____ 7. Selects appropriate teaching materials and has them ready for use.
_____ 8. Provides for individual activities and learning experiences as well as group experiences.

_____ 9. Correlates textbook material with various materials and methods of instruction.
_____ 10. Plans for field trips and use of community resources.
_____ 11. Becomes familiar with various types of planbooks and schedules.

IV. DEMONSTRATES COMMAND OF SUBJECT MATTER AND FUNDAMENTAL CONCEPTS OF INSTRUCTION THROUGH

A. Preparation

_____ 1. Shows persistence in seeking added information and knowledge from many sources in his teaching.
_____ 2. Seeks help and suggestions from specialists and consultants in subject areas where needed.

B. Teaching Performance

_____ 1. Shows adequate background in subject matter and levels he is assigned to teach.
_____ 2. Shows knowledge of contemporary social issues.
_____ 3. Shows knowledge of a variety of teaching materials in his subject and grade.
_____ 4. Relates his area of knowledge to other areas of knowledge.
_____ 5. Demonstrates competency in the areas of reading guidelines.

V. DEMONSTRATES SKILL IN MANAGING INSTRUCTION THROUGH

A. Teaching Performance

_____ 1. Utilizes pre-tests to determine where instruction is to begin.
_____ 2. Motivates children.
_____ 3. Involves students creatively.
_____ 4. Teaches planned units effectively.
_____ 5. Presents lessons logically.
_____ 6. Presents a concept and reinforces it in various ways.
_____ 7. Develops and uses learning materials appropriate to the learning situation.
_____ 8. Summarizes lesson in an effective way.
_____ 9. Reviews lessons and reteaches for students who have fallen below expected achievement levels, working for the success of each child.
_____ 10. Recognizes when students have completed the instruction and are prepared for post-tests.
_____ 11. Provides meaningful independent work.
_____ 12. Gives directions so that pupils clearly understand what is to be done, and why it is to be done.
_____ 13. Demonstrates satisfactory management of time.
_____ 14. Uses types of reasoning appropriate to pupil level.
_____ 15. Uses effective techniques in asking questions.
_____ 16. Develops a questioning attitude and intellectual curiosity in pupils.

_____ 17. Develops effective processes of problem solving and critical thinking on the part of pupils.
_____ 18. Guides students in making generalizations.
_____ 19. Involves students in individualized or group work when students work under a leader or work cooperatively. Utilizes this type of experience for observing or as a time for helping individuals.
_____ 20. Helps children establish good oral English habits.
_____ 21. Teaches the where, the how, the when of good reference and research work.

B. Use of Wide Variety of Instructional Media

_____ 1. Shows familiarity with types of hard and soft ware and purposes for using each.
_____ 2. Shows skill in operating audio-visual equipment.
_____ 3. Uses multi-media instruction effectively.
_____ 4. Shows familiarity with published schedules of local TV stations; especially educational channel.
_____ 5. Utilizes materials available in library--resource center.
_____ 6. Utilizes in the classroom, as far as possible, the common reference and research tools most often used by pupils.
_____ 7. Shows familiarity with contents and materials available from the local Museum of Science, Art Gallery, Historical Building.
_____ 8. Utilizes the community as an extension of the classroom learning situation.
_____ 9. Has started a file of community resources including people, places, and written material.
_____ 10. Creates effective bulletin boards through pupil involvement.

C. Understanding Children

_____ 1. Works effectively with pupils in small and large groups.
_____ 2. Evidences awareness of interest and attention span of pupils.
_____ 3. Evaluate appropriateness of specific curriculum programs and materials for particular groups of children.
_____ 4. Utilizes socio-metric devices for diagnostic purposes.
_____ 5. Writes anecdotal records and uses them for pupil appraisal.
_____ 6. Identifies children in need of referral.

D. Flexibility

_____ 1. Groups appropriately.
_____ 2. Adapts instruction to changing needs of pupils and class.
_____ 3. Deals appropriately with unexpected situations as they develop.

E. Evaluation

_____ 1. Evaluates each lesson and plans subsequent lessons based on the evaluation.

_____ 2. Uses students' reactions and progress to evaluate his own performance.

VI. DEMONSTRATES ABILITY TO EVALUATE STUDENT PROGRESS AND GROWTH THROUGH

A. Testing

_____ 1. Matches and selects for use available standardized tests with the stated grade and school objectives.
_____ 2. Skillfully conducts a standardized testing situation.
_____ 3. Administers tests in such a way that the children are free from the undue anxieties.
_____ 4. Translates standardized test scores into a picture of strengths, weaknesses, and abilities of individual pupils.
_____ 5. Displays working knowledge of vocabulary of testing (norms, percentile ranks, grade scores mental age, mean, median, standardized deviation, etc.
_____ 6. Constructs appropriate tests.
_____ 7. Utilizes the results to evaluate his success in teaching a unit of work.
_____ 8. Administers diagnostic tests and uses results.
_____ 9. Administers and interprets informal reading inventories and other formal reading inventories and other informal types of evaluation.

B. Evaluation Techniques

_____ 1. Clearly defines the elements to be considered in evaluating student progress.
_____ 2. Studies individual pupil and school records carefully as a basis for evaluating pupil progress.
_____ 3. Recognizes individual differences in evaluating pupil performance.
_____ 4. Helps pupils to appraise their own work.
_____ 5. Works out a means to report progress toward objectives not specifically stated on the report card.

VII. DEMONSTRATES FITNESS FOR TEACHING THROUGH

A. Personal Qualities

_____ 1. Physical Health
   a. Has stamina adequate for job teaching
   b. Shows physical vitality and enthusiasm
_____ 2. Mental Health
   a. Appears to be emotionally stable
   b. Tends towards flexibility rather than rigidity in thought and behavior patterns
   c. Has an appropriate sense of humor

_____ 3. Personal Appearance

_____ 4. Dependability
- a. Seldom if ever late
- b. Carries out all tasks effectively and on time
- c. Is trustworthy in all respects
- d. Is loyal to his school district

_____ 5. Attitudes
- a. Accepts and profits from constructive criticism
- b. Demonstrates ability for self-evaluation
- c. Reveals genuine interest in pupils
- d. Is sensitive to feelings and needs of others

_____ 6. Voice and Language
- a. Adjusts voice appropriately to the instructional situation
- b. Uses spoken language correctly, effectively and appropriate to the situation
- c. Uses written language correctly, effectively and appropriate to the situation
- d. Writes effectively and legibly
- e. Spells correctly

B. Professional Qualities

_____ 1. Initiative
- a. Shows initiative in developing lessons, materials, techniques
- b. Participates in school and faculty activities
- c. Utilizes opportunities to assume responsibility
- d. Shows interest in and helps supervise pupils in extra-class activities

_____ 2. Interest
- a. Behaves in an ethical and professional manner
- b. Shows creativity and sincere enthusiasm in developing lessons, materials, techniques
- c. Is willing and able to express himself in a positive manner
- d. Acquires a knowledge of the community
- e. Participates in community activities
- f. Sets individual and professional goals and evaluates himself in terms of these
- g. Works on his self-evaluation, determines his strengths and weaknesses, is responsive to suggestions
- h. Continues study and research

VIII. DEMONSTRATES SKILL IN HANDLING SCHOOL ROUTINE

Appendix L

Objectives for the Elementary School Child

CHEEKTOWAGA CENTRAL SCHOOL DISTRICT NO. 1

November 4, 1971

Objectives for the Elementary School Child
Developed by the C.D.M.S. Policy Board

EACH CHILD SHOULD DEVELOP A POSITIVE SELF-IMAGE AND A SENSE OF WORTH IN ORDER TO BEGIN TO ESTABLISH A SET OF PERSONAL VALUES

I. Each child shall value the unique contributions of himself.
   a. have a good feeling about himself.
   b. perceive, understand, respect and accept self.
   c. develop a realization that he is a loving individual and is capable of being loved.
   d. be able to accept, express, and control human emotions and needs.
   e. develop a feeling of compassion.
   f. develop a sense of humor.
   g. develop the capacity for self-sufficiency.
   h. develop a personal conscience and demonstrate the ability to make sensible decisions.
   i. feel good about, develop, and utilize his competencies in areas of his interest.
   j. experience a sense of personal achievement.
   k. think imaginatively and explore his own ideas.
   l. recognize his comparative strengths and weaknesses in specific areas.
   m. develop mechanisms for dealing with frustration and failure.

II. Each child should be able to adapt himself to a variety of situations and should be able to make contributions in a variety of social settings. He should
   a. develop the capacity for independent action.
   b. develop a sense of responsibility.
   c. be able to operate effectively in groups.
   d. be able to exercise leadership.
   e. develop listening skills.
   f. have a good attitude toward and be willing to try new things.
   g. be aware of the wide variety of alternatives and be able to choose intelligently from them.
   h. be able to operate in a cybernetic system.
   i. develop skills of evaluation, including self-evaluation.

III. Each child shall value the unique contributions of others. He should...
   a. understand and feel pride in his heritage.
   b. understand and respect the contributions and aspirations of minority groups.
   c. perceive, understand, respect and accept others.

d. be comfortable with a variety of adults.

IV. Each child should be involved in a variety of decision-making situations. He should...

a. be aware of problems that exist in his immediate environment and in the world today.
b. learn the skills which help him to identify specific problems, analyze the problems, and formulate conclusions.
c. have the opportunity to solve problems of immediate concern.
d. learn to critically analyze divergent ideas and to operate in with a variety of people.
e. be developing an awareness of his attitudes and values and how attitudes and values

V. Each child should be involved in individual creative experiences to develop his originality and inspire his self-expressiveness in any area of his interest. Each child should...

a. develop an aesthetic awareness and appreciation.
b. participate in creative activities and in original forms of planning.

VI. Each child should be growing in his academic endeavors. According to his ability, he should be developing in:

A. Receptive Skills:
1. Comprehends reading material in textbooks and in everyday life activities.
2. Knows the meaning of words commonly encountered in academic materials and in materials outside of school.
3. Recalls specific facts and main points of orally presented material.
4. Enjoys reading and derives pleasure from it.

B. Expressive Skills:
1. Expresses himself in appropriate oral presentations.
2. Expresses himself in appropriate written forms.
3. Expresses and understands the importance of non-verbal communication in everyday life.
4. Uses oral presentation, art forms, dance, writing, or physical activity to express original ideas.
5. Uses multi-media in presenting information and expressing original ideas.

C. Location Skills:
1. Interprets and constructs maps, tables, diagrams, graphs.
2. Uses reference materials.
3. Locates information on an assigned topic or a topic of his interest through use of a card catalog, parts of a book, mulit-media, direct and vicarious experiences.

D. Organization Skills:
1. Develops the ability to skim, outline.
2. Develops the ability to summarize.
3. Finds main idea and specific details.

4. Classifies and organizes materials to obtain meaning or to help him to remember.
5. Arranges related items in sequence.
6. Takes notes, prepares reports with ocumentation.

E. Interpretation Skills:
1. Relates content to one's own experiences.
2. Makes comparisons.
3. Draws conclusions.
4. Judges adequacy, reliability and relevance of evidence for a specific purpose.
5. Identifies biases, inconsistencies, or errors in orally presented materials or in written materials.

F. Quantitative Skills:
1. Solves quantitative problems involving whole numbers, fractions, and decimals using addition, subtraction, multiplication, and division.
2. Translates quantitative presentations to verbal form.
3. Translates verbal problems to quantitative form.
4. Applies quantitative skills to everyday problems.

G. Knowledge and Use of Conventions:
1. Writes legibly.
2. Uses appropriate punctuation, usage, capitalization and spelling in written material.
3. Uses correct pronunciation and enunciation in oral communication.

H. Health
1. Knows the basic principles of good nutrition.
2. Knows how to protect himself and others from disease.
3. Knows the physical, psychological, and social effects of drugs, alcohol, and tobacco.
4. Engages in appropriate physical activities.
5. Develops practices to promote and maintain his own physical and emotional health.
6. Understands the principles of human growth and development.

I. Specialized Knowledge:
1. Has accurate information about scientific phenomena commonly encountered in everyday life.
2. Participates in interdisciplinary learning which emphasize analysis, planning, and the application of information to the solution of human problems.
3. Knows specific facts and principles about government on local, state, and national levels.
4. Knows specific facts and simple principles of economics.
5. Knows about social problems and discusses proposed social actions.
6. Knows about the contributions of various races and ethnic groups in the progress of mankind.
7. Employs the processes used by biological, physical, and social scientists to investigate problems and to obtain information.
8. Knows the ways by which things can be changed in a democratic society.

9. Knows the reason for rules, regulations, and laws in any social setting.
10. Has information about the nature of occupations and the world of work.
11. Knows how to use leisure time wisely.
12. Knows how to write behavioral objectives.

BIBLIOGRAPHY

Material adapted from the following sources:

Objectives for the Elementary School Child Developed by the Greenburgh Task Force, in conjunction with the C.I.T.E. Project, Teachers College, Columbia University, May 25, 1971.

Objectives for the Elementary School Child Developed by the Somers Task Force (C.I.T.E. Project) - April 21, 1971.

Objectives for the Elementary School Child Developed by the Yorktown Task Force (C.I.T.E. Project) - June 11, 1971.

Project Redesign, Annual Report 1970-71. Albany, University of the State of New York, the State Education Department, 1971.

Tentative List of Objectives for Cheektowaga Central School District, No. 1 - January 20-24, 1971.

Appendix M

Memorandum from Dr. Bukowski on Analyzing
Module Objectives and CDMS Teacher Competencies

TO: Professional Participants of CDMS

FROM: Walter Bukowski

SUBJECT: Analyzing Module Objectives and "CDMS Teacher Competencies"

DATE: February 25, 1974

I have completed an examination of current module objectives. It is obvious that the effort extended by program developers was considerable and most fruitful in that it was responsible for CDMS being the only operational trial project in New York. Keep in mind this admiration, as you read some of my more critical comments contained in this report. Also, keep in mind that such criticism is made with the view that it will abet us to construct a better program of teacher preparation.

A. A collation of the anticipated outcomes of the required modules with the items of "CDMS Teacher Competencies" has provided data for these observations:

1. There is no provision in the modules for category "VII. Demonstrates fitness for teaching through...A. Personal Qualities" and "B. Professional Qualities."

2. There is no provision for category "VIII. Demonstrates Skill in Handling School Routine". Additionally, there is no further specification of the category.

3. Of the remaining 102 items in categories I through VI, it has been found that:

a. 41 of these items are explicit as objective outcomes in the required modules.

b. 11 of these items are implicit process outcomes of the required modules.

c. 50 items are not attended in the required modules.

B. Items of "CDMS Teacher Competencies" not explicity attended in the required modules are identified below. Those marked with an asterisk (*) indicate that implicity provision has been found in the module.

I. (category has nine such items)
   A. 1 and 3
   B. 1, 2, 3, 4 and 5
   C. 1 and 2

II. (category has ten such items)
   A. 1 and 2
   B. 1, 2 and 3
   C. 1 and 2
   D. 1*, 2 and 4

III. (category has four such items)
   A. 1 and 2
   B. 5* and 11

IV. (category has three such items)
   A. 2*
   B. 4 and 5

V. (category has twenty-six such items)
   A. 2*, 3, 8, 11*, 13, 14, 15, 16, 17, 18, 19*, 20* and 21
   B. 4, 5*, 6, 7 and 10
   C. 1*, 2, 4 and 6
   D. 1, 2 and 3
   E. 2

VI. (category has nine such items)
   A. 1, 2, 3 and 4*
   B. 1*, 2, 3, 4 and 5

VII. (all items of this category are excluded)

VIII. (all items of this category are excluded)

C. Major areas of "CDMS Teacher Competencies" that do not appear adequately attended in the required modules:

"I. Demonstrates Ability to Work with People Through
   A. Teacher-Staff Relationships
   B. Teacher-Pupil Relationships
   C. Teacher-Parent Relationships

II. Demonstrates Skill in Establishing Proper Classroom Climate
   B. Cooperative Participation
   C. Well-Directed, Purposeful Activities
   D. Attention to Physical Factors

III. Demonstrates Skill in Planning for Instruction Through
   A. Teacher-Pupil Planning

V. Demonstrates Skill in Managing Instruction Through
   A. Teaching Performance (items 11-21)
   C. Understanding Children
   D. Flexibility
   E. Evaluation

VI. Demonstrates Ability to Evaluate Student Progress and Growth Through
   B. Evaluation Techniques

VII. Demonstrates Fitness for Teaching Through
   A. Personal Qualities
   B. Professional Qualities

VIII. Demonstrates Skill in Handling School Routine"

D. Additional observations about current CDMS modules derived through this examination of their objectives:

1. In general, they appear to represent a modular packaging of pre-practicum courses taught on the two college campuses.

   a. Some modules cannot stand alone, that is, because they lack explicitness they will lose substance if the module developer is not "teaching the module."

   b. Often there are no or too few options in learning activities, thereby losing the opportunity for individualization of instruction, an essential feature of CBTE.

2. Most module objectives' activities are adequately specified, however, the condition under which the activity is to be performed is often lacking. Too often, the criteria for acceptable level of performance is deficient or lacking.

3. While the total number of modules still seems overwhelming to the incoming intern, it is recalled that completion of all required modules does not provide for about one-half of the items in the "CDMS Teacher Competencies." This is undoubtedly due to the fact that the subject-content orientation of the modules is incongruous with the emphasis on instructional processes contained in the "CDMS Teacher Competencies."

4. More effort is needed to develop consequential effect or "competence level" into each module component.

5. Finally, the entire package of module components do not project a clear conceptualization of the nature of teacher preparation offered in the CDMS Program.

E. Observations about the definition of "CDMS Teacher Competencies" obtained during this analysis:

1. It is valuable in that it directly relates to the needs of learners in the elementary grades of the two school districts.

2. The focus is appropriately upon instructional processes rather than upon specific subject-content areas.

3. It is extensive, detailed and in general, comprehensive.

4. Some items would be quite difficult to handle in any assessment as they are phrased.
   a. There is ideational repetition.
   b. There is ambiquity in some terms.

5. At best, categories VII and VIII are dependent upon the subjective application of supervisory personnel.

6. There is some question as to whether this listing should not reflect some indication of the relative importance of the competencies.

7. It has great functionality as a reference that defines good teaching in the two school districts, however, it may have to be made more universal to insure a broader range of applicability.

Appendix N

Memorandum from Dr. Bukowski on
Program Improvement Activities

TO: Professional Participants of CDMS Program

FROM: Dr. Walter Bukowski, Director

SUBJECT: Program Improvement Activities

DATE: April 10, 1974

Introduction

CDMS Program improvement activities are being planned for this spring and summer in order to effect changes that our formal program might resemble the outline "CDMS Program Design" attached to this communication. The proposed changes are extensive but necessary, and they should be actualized as soon as is feasible. It is anticipated that they will strengthen the formal program by providing: (1) a definite generic core of instructional preparation; (2) an elementary education area that deals with the nature of the learner and curriculum, as well as a reduced number of subject-content modules; (3) for inclusion of personal or professional qualities as they are directly pertinent to the generic core or possibly, the specialization areas; and, (4) culminating seminars at the end of the internship. Additionally, this design recommends certain revisions in pre-internship activities held at the two colleges. Hopefully, this program design will provide for a more satisfactory experience for interns and CDMS professionals.

Participation in Program Improvement Activities

The involvement of professional personnel should follow these guidelines:

1. It should be voluntary, motivated by interest.

2. It should be broad based, providing for participation of all elements of CDMS.

3. Compensation will be provided for work that extends beyond normal contractual obligations within the limits of available resources of CDMS.

Activities of Program Improvement

These various tasks can be placed into the two stages of Product Development and Product Analysis as enunciated below.

Stage A - Product Development: This would be undertaken by small work units of one to about three persons. Each such work team would be responsible for one segment of the generic core or an elementary education area. Content would be outlined, structure and sequence ascertained, instructional activities

determined and the format of "packaging" whether module form or other, fulfilled. Individual professionals could work on more than one Product Development team.

Stage B - Product Analysis: A sort of review team of about five or six persons representing a cross section of CDMS personnel would perform these functions. Each team would undertake necessary responsibilities for one or more segments of the program for which they hold professional expertise. Obviously, if individuals review a number of segments then program coordination is enhanced and therefore, individuals might serve on more than one Product Analysis team. Each team would undertake an examination of the efforts of the product development work unit in order that a wider, more representative source of related inputs be made available to strengthen newly produced segments of the program. Specific functions would include a critical reading of produced materials, one or two meetings with fellow members of the analysis team and a representative of the development unit.

Reimbursement for Participation

It will be recommended that virtually all available financial resources of CDMS be made available to compensate professionals for their participation in activities of program improvements. Nevertheless, this compensation will still be somewhat nominal due to the limitation of available funds. The specific allocation of payments will depend upon the demands of the particular activity. For instance, it is anticipated that product development would be more demanding than product analysis and payment would then be commensurate. A more definitive idea on payments will be soon forthcoming.

Timetable

The sooner that these changes are placed into the CDMS Program, the better for all involved, therefore a schedule will be based upon the deadline for implementation of September 1974, when a new group of interns begin their internship. They would operate under the newly revised program. In order to meet this target time, work should begin this spring and be completed so that all necessary materials can be typed, duplicated and processed during the month of August, and be available for distribution at the start of the fall semester. An overview of the timetable might be represented as follows:

May	13-17	Begin Stage A -	
	20-24		
	27-31		
June	3-7	PRODUCT DEVELOPMENT	
	10-14		Start Stage B -
	17-21		
	24-28	Complete Stage A -	
July	1-5		PRODUCT ANALYSIS
	8-12		
	15-19		
	22-26		Complete Stage B -
	29-2		
August	1-31	Typing, Duplicating and Processing Materials	

It must be noted that college personnel may be available when their semester ends on May 10th. Supervising teachers of the two school districts who opt for spring involvement may be released from their teaching duties for meetings about product development (Stage A) or product analysis (Stage B).